630

the Carolina Farmer

OFFICIAL ORGAN
NORTH CAROLINA
RURAL ELECTRIC COOPERATIVES

January, 1954

The Proper Care of Farm Ponds

— See Page 8

See the picture

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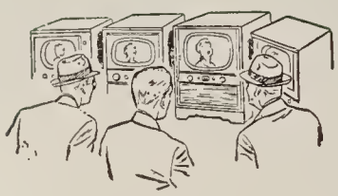

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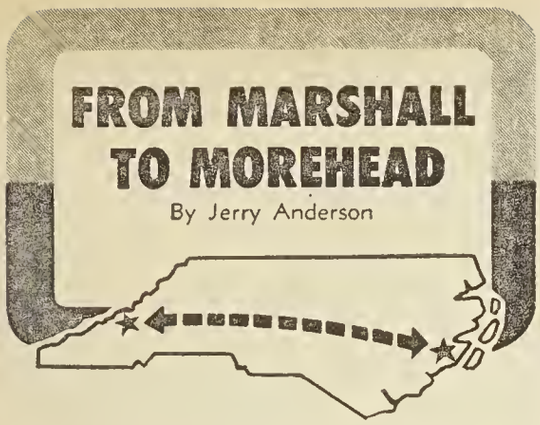

On page 18 you'll find a short essay by Kirby Able, editor of the **South Carolina Electric Co-op News**, on God and patriotism. It is condensed from a page one editorial in that publication's Christmas issue. In it, Kirby paints one of the clearest pictures we've seen of the changing concepts of patriotism in American life.

We think you'll be interested in knowing something of the young man who penned these striking words. He was born and reared on a South Carolina farm, chopped cotton and carried water like everyone else, and attended school whenever he could.

He had an outstanding war record and still has schrapnel in his body. When he returned, he operated a small weekly newspaper for a time before joining the staff of the **Electric Co-op News** as managing editor. In that post he became our colleague, and we have known him and his work for some time.

And knowing both, we have long been convinced that the South Carolina farmer never had a better friend. Kirby has championed the farmer's cause courageously, but always fairly. He has consistently spotted and exposed the people and forces which would harm the farmer. And he has stoutly defended the rural electrification program.

In doing so, he undoubtedly made enemies; but he also earned for himself a lot of respect. Unfortunately, an enemy talks louder and longer than a friend. So Kirby's paper appeared recently with one of the vilest, most spiteful letters we've ever seen printed in it. It accused the paper of printing "lies and villifications" and intimated that Kirby was "the local commie agent." The paper should, the letter said, "be investigated".

He printed every ugly, heart-breaking word of it. He offered to resign if any impartial committee could find evidence of "lies and villifications" in his paper. He offered to match his record as an American against that of the letter writer or anyone else.

This challenge, of course, was not accepted. In this day of labels it is not

(Continued on Page 18)

the **Carolina Farmer**

"Covering North Carolina From the Mountains to the Sea"

Reg. U. S. Patent Office

. . . . . For January, 1954

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News, Tides And Trends

For the North Carolina Farmer

Methyl Bromide, MC-2 gas, is the first material yet found to effectively control both weeds and nematodes in tobacco plant beds. Farmers are reminded that now is a good time to prepare the plant bed for next year's crop of tobacco. Briefly, here is the way to use Methyl Bromide: Cover the plant bed with a plastic or tough kraft paper and apply the fumigant. It's a liquid under pressure in a small can and changes to a gas when you puncture the can. The cover over the plant bed must be airtight to keep the gas in contact with the soil for 24 to 36 hours. Soil moisture should be about right for planting corn, and for best results, air temperature should be 50 to 60 degrees. Methyl Bromide can be applied up to within two or three days of the seeding date. It is not a fertilizer, so 1½ to two pounds of 4-9-3 should be put on any time before or after treatment.

* * *

"Farmers 1953 Income Tax" (Extension Circular No. 366) is now available through local county farm agents, or the Department of Agricultural Information, N. C. State College, Raleigh. The booklet is designed as an aid in preparing the farm income tax return for 1953.

* * *

At a recent all-day meeting of the North Carolina Milk Commission, J. V. Whitaker, milk marketing specialist in the State Department of Agriculture, was appointed as the commission's full-time executive secretary. The commission also voted to set up a technical study committee to recommend permanent policies. The committee will consist of six members, to be announced later: two specialists from N. C. State College, and one representative each from the N. C. Department of Agriculture, the Milk Commission, milk distributors and milk producers.

* * *

The 1953 flue-cured tobacco crop is 8 per cent below last year's production, but 10 per cent higher than the 1942-51 average. The 1953 crop was estimated at 1,257,000,000 pounds. Yields per acre were the fourth highest on record, one pound above last year, 82 pounds below the 1950 record.

Tar Heel farmers, along with the remainder of the nation's cotton and peanut growers, voted overwhelmingly in the December 15 referendum for marketing quotas on cotton and peanut production in 1954. The voting was scattered among 77 cotton counties and 44 counties in which peanuts are grown.

* * *

R. Flake Shaw, Greensboro, was reappointed executive secretary of the North Carolina Farm Bureau at a meeting held in Raleigh early this month. At the same meeting, an 11-man executive committee was named by the organization's board of directors: C. Gordon Maddrey, Ahoskie; State president; A. D. Williams, Wilson; Zeno Ponder, Marshall; and M. A. Morgan, Smithfield, vice-presidents; A. C. Edwards, Hookerton; Clay Bruton, Mt. Gilead; W. W. Eagles, Macclesfield; P. M. Taylor, White Plains; Dr. L. M. Massey, Zebulon; and J. Carver, Rougemont.

* * *

A new low cost self-feeder silo which can be built for ¼ the cost of upright silos, has been developed by Oregon State College. The new silo reportedly reduces labor required for feeding cattle and may be used for other purposes when empty. It has a pole frame, is 70 feet long, 21 feet wide and 19 feet high. Sled-mounted racks cause cattle to push forward when eating, moving the rack into the silage. In this manner, they eat their way through the silo and nobody lifts a fork.

* * *

United States agricultural imports in 1952-53 totaled $4.3 billion, a reduction of 8 per cent from the $4.7 billion in 1951-52.

* * *

H. D. Godfrey, State administrative officer for Agricultural Stabilization and Conservation, has urged North Carolina farmers to check frequently on the condition of their storage facilities and their stored grain, and warns: "Every year, farmers take a big loss because bins and cribs are not constructed properly, not located in the right place, grain is not in proper condition for storage, or proper safeguards are not taken against insects and rodents."

MAIL BOX

To the Editor:

Thank you for returning the photograph which you used in your December issue of the *Carolina Farmer*. I wish also to express my appreciation for the article concerning our church. It is well written and most readable. You have done a good job on a story which could have been merely factual and somewhat uninteresting. It is my hope that your readers will find it helpful and that other rural communities may be encouraged to improve the quality of their own churches.

There is no way of knowing the influence which you may have upon the lives of people in North Carolina, particularly in rural sections. An editor has a great opportunity to formulate public opinion, and I commend you and those connected with you for the type of publication you are seeking to produce.

WILLIS BENNETT, Pastor
Olive Chapel Baptist Church
Apex, Route 3

To the Editor:

As a new year begins, I should like you to know how much my family and I have enjoyed the *Carolina Farmer* during the past year. We are looking forward to another twelve months of reading with you.

We feel that your publication presents each month an excellent picture of farm news in North Carolina, and that your features are geared to the improvement of rural life.

We particularly enjoyed the feature, "The Church and the Good Earth", in the December issue—as we have enjoyed so many previous stories.

A happy New Year and continuing success to the *Carolina Farmer*.

JOHN STERLING
Ronda, Rt. 1

To the Editor:

We greatly apprcciate our Pee Dee Electric Membership Corporation.

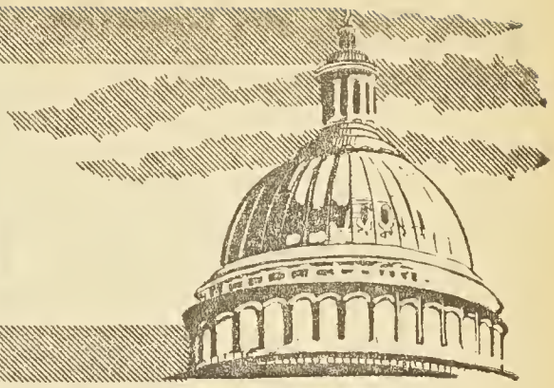
GEORGIA W. SMITH
Rt. 1, Rockingham

To the Editor:

Rural electrification was a blessing to our rural community.

MRS. POLLY SNIDER
Rt. 5, Lexington

William S. Roberts
REPORTS FROM WASHINGTON



In the fanciest tradition of the power trust lobby, a group of nine newspapermen who write for a substantial number of city papers and business journals throughout the country, have just been brought back from an air tour of selected power projects. What they were shown included some focal points in the struggle of the private power industry to wrest the benefits of Federal hydro power developments from rural electric co-ops, municipalities and other small non-profit distributors. The air junket was organized and paid for by the National Association of Electric Companies, last year's top spending registered lobby in the nation's capital.

At every stop, one of the junket's members noted, the newsmen were greeted by top power company executives, assigned by their national lobby to present the picture of the power projects the power companies wanted the writers to see.

From Niagara to Hells Canyon

They started with Niagara Falls, where a group of New York power companies are fighting both the Federal government and New York state to grab off the site for redevelopment of one of the biggest sources of low-cost power remaining in the nation. From there they proceeded to San Francisco, home and center of Pacific Gas & Electric Company's empire. Recently a national magazine wrote an article titled and based on the boast that "PG&E IS California."

From there the group flew to the Pacific Northwest, where more power company executives stressed private development in the face of the gigantic development brought to the area by the Bonneville Power Administration. They took the journalists to the Hells Canyon site for proposed Federal development, but spent most of their time trying to sell Idaho Power Company's proposals for three smaller dams in the area.

The final stop was at Denver, Colo., where power company executives put on a flossy "celebration" of the connection of Denver's 250,000th meter.

The objective of the power company lobby was obvious—to gain favorable influence over reporting of news on private-Federal controversies. The results are questionable. In the first place, the taint of power trust influence-peddling efforts of the past is well known, and the free junket for the newsmen revived some older memories of the Insull-Hobson heyday of the power trust. Secondly, none of the three major wire services nor the nation's most powerful newspapers from the standpoint of circulation were represented. Only one, the *Christian Science Monitor,* could be placed in that latter category, and in the case of the Monitor there is every reason to believe that the tour was undertaken with a lot of the salt of objectivity.

The Hearst, Scripps-Howard and Gannett newspaper groups were represented, as well as correspondents for some West Coast papers and some 18 in the Southwest. But the only others were two New York business-financial journals and McGraw-Hill's *Electrical World.* The latter reflect the thinking and philosophies of the groups they are published for, and it is doubtful if it changed any firmly implanted viewpoints in favor of the private power lobby.

Power Lobby Objective

In the final analysis, public opinion will determine whether the National Association of Electric Companies' air tour was a success or not. The same opinion will have a long-range effect on farmers' electric rates, since the power lobby has one objective—monopolization of low-cost Federal hydro power sources. They want to be the middle man at the toll gate, levying a bounty on any public resources before they are available for distribution by farmers' non-profit rural elec-

(Continued on Page 24)

"Climb Upon my Knee, Sonny Boy"

The Carolina Farmer
January, 1954

How Good is Infrared?

A question poultrymen everywhere are asking as the heat lamp rage sweeps North Carolina

RURAL ELECTRIC cooperatives throughout North Carolina report that the use of heat lamps (infrared) for brooding chickens was one of the most popular farm applications of electricity during 1953. They predict that hundreds of other farmers will be using heat lamps this year.

This type of brooding has now been used for several years on many farms, and the experiences of the poultrymen who have tried it provide, for the first time, a solid base for estimating its value.

It is now clear that many of the early apprehensions about heat lamps were groundless; it is equally clear that many of the early claims about their value for brooding were exaggerated. Unfortunately, many poultrymen began using heat lamps without bothering to learn about their shortcomings; as a result, many of them had unpleasant experiences.

But in the last few years power suppliers, experiment stations and manufacturers have piled up an impressive amount of data on heat lamp performance. The conclusions reached in this article are based on a careful analysis of that material, along with the experiences of many individual North Carolina farmers.

In order to evaluate heat lamp brooding it is first necessary to understand the infrared manner of heating. This can easily be accomplished by comparing a heat lamp with the sun. The sun gives off radiant energy which, when it reaches the earth, is half visible light and half infrared. A characteristic of infrared energy is that it does not heat the air as it passes through it. Instead, it is instantly transformed into heat when it strikes an absorbing body.

And because the sun actually heats you instead of air, you can cool off by getting into a shade. This contrasts with most other heat sources which warm the air directly.

This same principle is employed in the heat lamp. When used for brooding, for example, the heat lamps warm only the chickens and the litter, not the air around them.

And it is this principle that is primarily responsible for both the advantages and disadvantages of heat lamps as brooders.

In actual application, the use of heat lamps varies from the small barnyard flock to large commercial installations in which as many as 40,000 chicks may be brooded at one time. The principle, however, is the same regardless of size.

Usually 250-watt lamps are used, one being sufficient to brood as many as 100 chicks. As the size of the flock increases, more lamps are added (see illustrations) to provide approximately 250 watts for each 100 chicks. Infrared brooders may now be purchased in almost any multiple size, although many farmers have successfully built their own.

The brooding unit should hang at a minimum distance of 18 feet above the litter for the first few days. As the chicks grow older and stronger, the unit is raised so that the heat is less intense. The lamps provide a comfort zone in which the heat is concentrated directly under them, and is progressively less as the distance from the center is increased.

Because of this, each chick is its own thermometer. When it needs heat, it stays near the center of the comfort zone; when it is comfortable, it moves toward the outside. A regular thermometer would be misleading when used with infrared brooders anyway, since the air is actually not heated.

It is necessary to place a circular draft-shield around the chicks during their early days. This prevents draft and also keeps the chicks near the unit until they learn to find their own comfort area.

Thermostat Requirements

Thermostats may or may not be used with the brooders. The usual recommendation is that thermostats be used if more than three lamps are used in a unit. They are not generally considered a good investment for one or two lamps. Usually when thermostats are used they are connected with alternate lamps, so that half are controlled and half are not.

If thermostats are not used, there are several other ways of controlling the heat. One is to simply raise the unit as the chicks grow stronger, or as the weather becomes milder. Another is to disconnect one or more lamps on mild days. When thermostats are used with multiple units, they should be mounted on a wall away from the unit.

One of the paramount advantages of infrared brooding is that the original installation cost is usually considerably lower than that of other brooding systems of comparable capacity. This is especially true if the poultryman builds his own brooder.

Experience has shown that infrared has many other advantages. One is that the chicks are visible at all times, mak-

This eight-lamp infrared brooder will brood up to 800 chicks. Here the baffle has been removed for examination of litter, which the lamps keep dry at all times.

ing it easy for the poultryman to observe any abnormalities or signs of disease in the flock. There is no danger of overheating, since the chicks can select the degree of heat best suited to their desires. During the first few weeks when the lamps are only about 1½ feet above the litter, the temperature directly under the lamp is about 50 per eent greater than the average needed by the chicks. This provides quick warm-up for the cold chick.

Cool Room Brooding

Infrared brooding is, of course, cool-room brooding. Tests have shown that chicks brooded in a cool room feather faster and have keener appetites for rapid and healthy growth.

Considerably less labor is required to care for the chicks with the infrared system. There is no hover to interfere with eleaning, watering and feeding. There are practically no maintenance and replacement problems, since the average life of an infrared lamp is 5,000 hours.

On the other side of the ledger, the first question to arise is "What happens if the power goes off?" Since the infrared lamps do not heat the air, practically all heat disappears immediately when the lamp goes off. Actual experience has shown that few losses have been sustained because of power failure. Service in rural areas now is constant and dependable. Of course there is always the chance that some emergency will shut off the power supply.

Because of this, it is recommended that some sort of auxiliary heat be provided for emergency use. Ordinary heaters will suit this purpose. Many poultrymen find it desirable to have an

alarm system rigged to the wiring in the brooding house to give a signal the instant the power goes off. The answer for the large commercial brooder who depends on electricity for many other things besides the actual brooding is a standby generator.

The possibility of a power failure seems to be the only real disadvantage of infrared brooding. The cost of power, of course, depends upon the local power rate, average outside temperature during the brooding period, and whether thermostats and other controls are used. In some part of the state the cost per chick for power may be slightly higher than for some other systems, but the low initial cost of the unit usually makes the overall cost just about the same.

Many of the early fears about infrared brooding have disappeared with experience. It has been shown, for example that infrared does not cause cannibalism or harm the eyes of chickens. Ventilation, as in all types of brooding, requires good management; the problem is not necessarily compounded when infrared is used.

One poultryman learned a bitter lesson in 1952. B. W. Macon, Rt. 1, Ramseur, placed 1,013 one-day-old chicks under two heat lamp brooders. The mortality rate was very low until the night of March 16. That night a heavy storm knocked the power off for about 40 minutes. During that time the highly nervous Leghorns became panicked by the darkness and stampeded into the corners of the building, killing 91 of them.

Darkness Precautions

It is easy to see what happened. The infrared lamps give a certain amount of light as well as heat. As a result, the chicks had never been in darkness until the night of the storm. A suggested precaution to prevent such panicking is to use a low-voltage bulb connected to a dry-cell battery and wired to the electric system. When the power goes off, the battery light comes on automatieally.

If the brooding unit is made at home, the poultryman should have expert advice from the county agent or eo-op electrification advisor. This is especially true in regard to both the wiring inside the unit and thc wiring leading to it. Adequate wiring is an absolute essential to satisfactory results, and should be installed by a competent electrician.

The draft shield around the ehicks should encompass an area of at least 12 feet. It may be sheet metal or corrugated cardboard or any other material that can be bent into a circle. If a square shield is used there is a danger of the chicks piling up in a corner and smothering.

* * *

Approximately 237,000 children in 21 communities received gamma globulin inoculations against polio paralysis in 1953. This year, the March of Dimes hopes to provide enough funds to inoculate at least 2,000,000 with GG.

It isn't easy to take

PROPER CARE OF FARM PONDS

Weeds and mud are the natural enemies of your pond, but researchers have found chemicals that provide positive control

This pond is used for irrigation, stock watering and recreation. Note the slope of the banks, an important consideration for later maintenance. Weed control begins with pond construction.

The farm pond is rapidly becoming standard equipment on North Carolina farms. Almost every farmer who has a few spare acres and a source of water either has a pond or is planning one.

The reasons for this popularity lie in the versatility of a properly built pond. During dry spells it provides a dependable supply of water for livestock and irrigation. At other times it is valuable for fire protection, orchard and garden spray, fish production and recreation. If the pond is carefully planned, constructed and maintained, it can provide many pleasant hours of boating, swimming and fishing for the farm family, in addition to its more practical functions.

But many farmers who have had ponds for several years have found that proper maintenance can be quite a problem. Often the water becomes so muddy it is useless for recreational purposes and weeds seem to multiply endlessly. Control of both conditions soon becomes a major concern for the pond owner.

Research carried out at North Carolina State College and the University of Missouri College of Agriculture indicates, however, that effective control is possible. The Missouri tests were concerned with muddy ponds.

The water in one test pond was so muddy before it was treated that one could not see his fingers after submerging his hand. After the treatment minnows could be seen to a depth of three feet. Laboratory tests later showed that the treated water was 94 per cent as clear as good city water.

The "magic" formula used in the Missouri tests was simply a little agricultural gypsum added to the water in the pond. Commercial aluminum sulfate can also be used, and is more effective. Usually, however, it is harder to obtain. Treatment for the average half-acre pond costs between $10-15.

How to Determine Volume

The treatment is simple. If gypsum is used, it should be scattered over the pond from a rowboat, and should cover as much of the surface of the pond as possible.

Aluminum sulfate doesn't need to be spread on the surface since it dissolves rapidly in the water. In the Missouri experiment, specialists put the aluminum sulfate into an old tub, carried it out into a shallow area, filled the tub with water, stirred it and poured the dissolved mixture directly into the water.

The amount of aluminum sulfate to clear up muddy water depends, of course, on the size of the pond. The volume of water in a pond can be determined by multiplying the average depth by the area in square feet. Average depth can be estimated as one-third of the depth at the deepest part of the pond.

About 12 pounds of aluminum sulfate is needed for each 1000 cubic feet of water in the pond. This is an average; more or less can be used depending upon the condition of the water.

The ponds treated in 1951 in Missouri are still clear enough for household use. Specialists there say results are about the same for both treatments.

Weeds in the farm pond are not as easily controlled. Dr. L. A. Whitford of N. C. State College has supervised considerable research in this field and has prepared a mimeographed report which is available from the college.

Dr. Whitford says weed control should begin with the construction of the pond. A few extra hours—and dollars—expended at this time will pay dividends for many years in relative freedom from weeds. The banks of the pond should slope steeply downward until the water is two or three feet deep. This confines most weeds to a narrow border at the edge where they can be manually removed or easily sprayed with herbicides.

Next in importance is frequent examination and care. Aquatic plants should never be purposely introduced into a pond built primarily for swimming or fishing. They will grow anyway, and when they first become established a few minutes work will usually remove them. In many cases removal by hand or with a rake, or cutting them off several times a year will prove the most economical method of control.

Following are Dr. Whitford's suggestions for controlling various kinds of weeds after they have obtained a start.

Algae: This is the first type of plant that becomes noticeable in a new pond. It is commonly called pond scum, and consists of fine, thread-like green plants without evident branches or leaves. Frequently they form mats on the bottom or float on the top. They are most troublesome in early spring and usually

disappear by the last of May in all except new or very cool ponds. One treatment of **bluestone** or **copper sulfate** will usually eliminate them for the season. When the algae are floating, or in shallow water, the bluestone solution can be sprayed over the areas with an ordinary farm sprayer. One tablespoonful of bluestone per gallon of water should be used. If a large area is involved, several pounds of bluestone can be loosely tied in a burlap bag and towed behind a boat in a zig-zag course. Bluestone is somewhat poisonous to fish but if only half of the pond is treated at a time the fish leave the treated area and none are killed. The remainder of the pond should be treated a week later.

Parrot's Feather (Myriophyllum): This plant is probably the most serious weed in farm ponds. It is a light green plant with a soft stem nearly as large as a pencil. Several leaves appear at one point on the stem, each resembling a small feather. Under favorable conditions it will completely cover all the water less than five feet deep. Every sprig should be removed as soon as it appears. If it is already established, the tips of plants above water should be sprayed with ½ to one per cent 2, 4-D ester. Unless four inches or more of the plant is above water drawdown the water before spraying so that several inches of all plants emerge. The spray should be made up to ½% or more of the actual chemical (i.e., with 50% concentrate use one part or more to 100 parts of water; with 32% concentrate use 1½% or more to 100 parts of water, etc.)

The young plants under water will not be killed, and if the pond is badly infested many young plants will come up from seed. This necessitates two treatments the first year and then one treatment in late May as long as the weed gives trouble.

Water Lilies have large underground stems that must be killed before the plants are eliminated. In late May after the leaves are mature spray heavily with one to 2% 2, 4-D. Even this concentrate may not kill all underground stems. The spray must be absorbed by leaves or parts above water and travel down stems to kill the under water and underground parts. It may take a month for water lily stems and roots to die.

Control of Waterweeds

Waterweed (Elodea) is a dark green plant that grows completely underwater. The large species, which is most objectionable, has three or four simple ribbon-like leaves nearly ¼-inch wide and about one inch long attached at the same point on the stem. It can be controlled by bluestone or copper sulfate. A loosely tied bag of the crystals should be towed zig-zag over the plants, as recommended above for algae. It should be dissolved at the rate of about 20 pounds per acre and not more than half the pond should be treated in one week to prevent killing fish. Several treatments may be necessary to control the weed in a badly infested pond. One pond owner has reported that freezing reduces waterweed if the pond is drawn down in autumn so that the bottom is exposed where the plants are growing.

None of the above chemicals is poisonous to men or animals and the water can be used to irrigate plants without harm if directions above are followed.

There are many other types of weeds for which there is no satisfactory chemical control except sodium arsenite, a highly poisonous compound which should not be used without expert advice. These include pondweed, duckweeds and water milfoil.

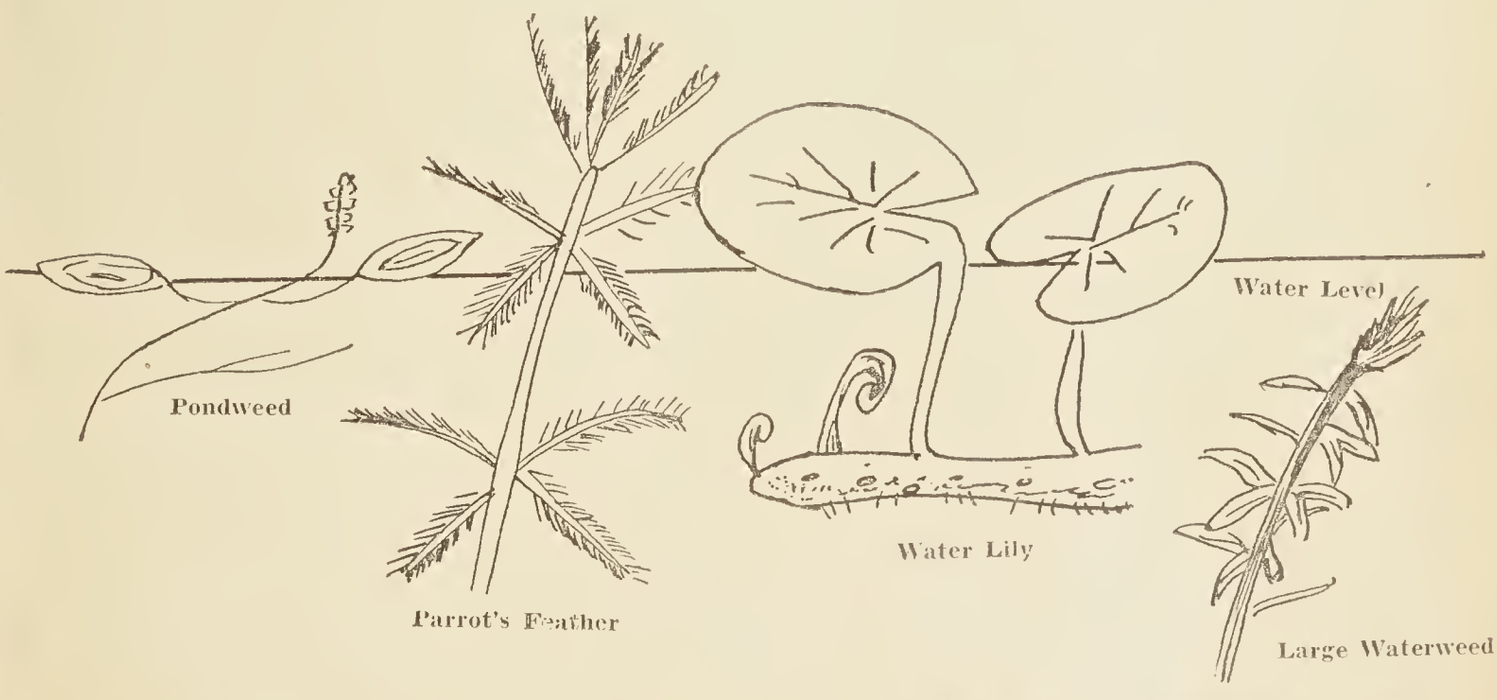
Cattail (Typha) should be confined to the pond border by steep banks and removed by hand once or twice a year.

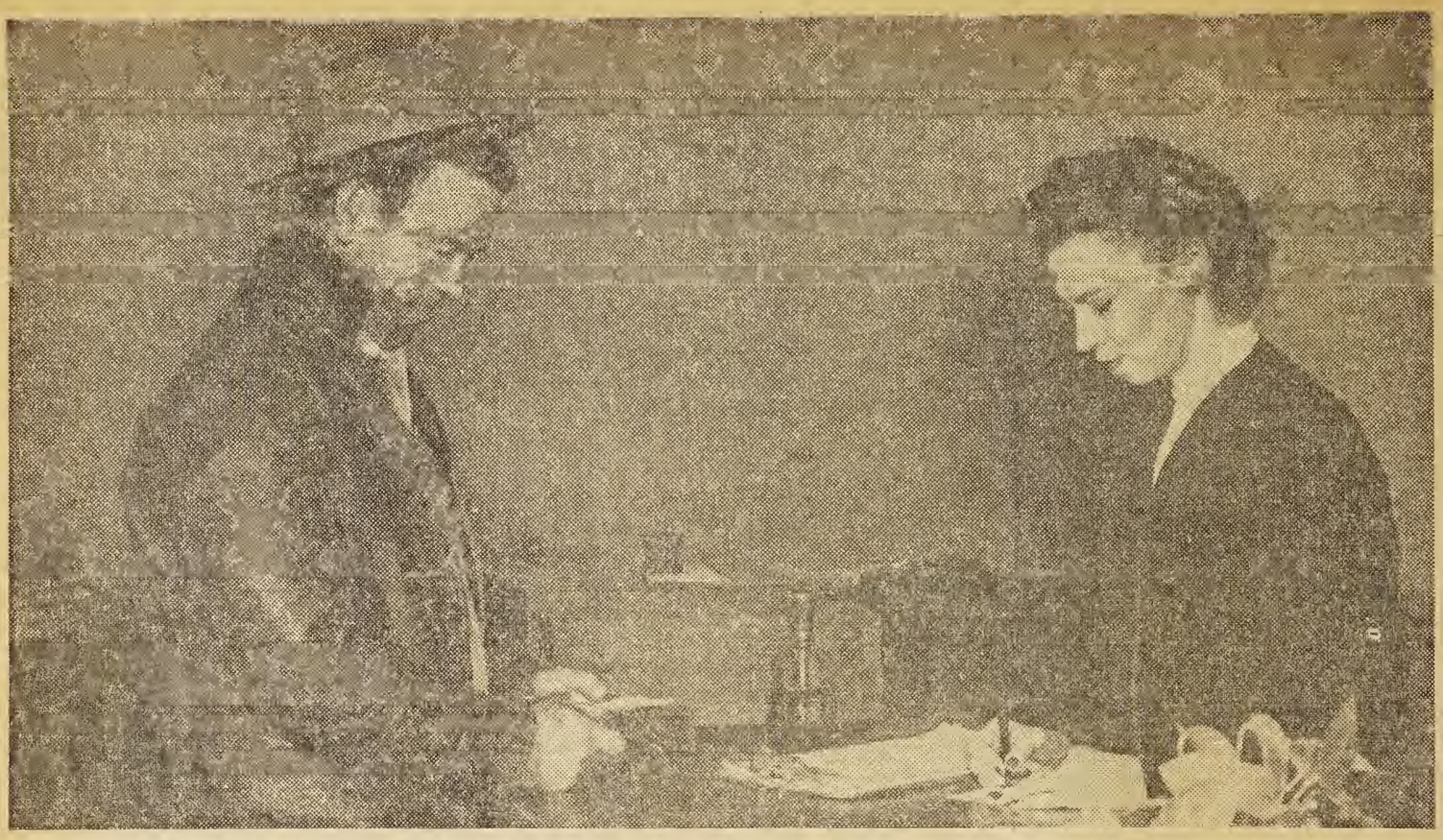
Grasses, sedges and rushes should also be confined by steep banks and cut by hand several times a year.

Control by fertilization can be used for any weed that grows in relatively deep water. The method is tricky and must be clearly understood, however. The idea here is to shade out the larger plants by a continuous crop of microscopic green plants. To be effective, fertilization must be started early and repeated often enough to keep the water so colored a light object disappears at a depth of one and one-half feet. Any weeds that reach the surface must be immediately cut off, or the fertilizer will stimulate their growth also. 300-500 pounds of fertilizer per acre per year are necessary and the first application of 100 pounds per acre must be made in

(Continued on Page 18)

SKETCH OF COMMON POND WEEDS





The principles that have electrified rural America

Part 3 of 4-Part Series

Payment In Proportion to Use

How is your electric bill determined? The answer is a cooperative principle

By William T. Crisp

SOME TIME SOON—even before you finish reading this page, if you care to—walk over to the light switch in your living room and flip the light on and off a couple of times. Then ponder this question for a moment: How much is it worth to you to have this service available in your home?

Then walk on into your kitchen and flip the switch or turn the dial on your electric range, or on your food mixer, or on your radio, or on any electric apparatus you have. And ponder the same question again.

Now expand your thinking just a bit. Try to imagine that electricity is unavailable to you for any purpose at any time. Count in your mind the many ways this tremendous energy affects your living, even your **thinking.** And now, finally, ask yourself this question: Considering its total value—past, present and future—how much is electricity worth to you?

It is, of course, an unanswerable question. Not because there is no answer, but simply because the answer involves things that are too innumerable and too immeasurable to be summed up.

The worth of electricity—like the worth of almost anything — is a somewhat personal matter. It depends a great deal upon who is using it and what it is being used for. Take, for instance, the kilowatts required to operate an electric pump for two hours. To a housewife, putting out her washing on Monday morning, those kilowatts are pretty valuable. They save her the labor—the aches, the short breath and the bent back—which she otherwise would have to suffer in carrying two or three tubs of water for herself.

Even so, were he suddenly faced with the necessity of hooking up the hose and fighting a fire in his barn, her husband would certainly find those same kilowatts immensely more valuable to him. If it were a tobacco pack barn, as could easily be the case in North Carolina, the water pumped by that current would probably save him several thousand dollars plus a whole year's work.

These two examples offer an intriguing comparison: For the housewife, two or three tubs of water and perhaps an hour's labor are involved; for her husband, the same two or three tubs of water but a year's labor are involved.

This comparison emphasizes the degree to which North Carolina farmer people have geared their living to and become vitally dependent upon electric service. For the farmer in many a community electricity was once only the fond hope that some day he might be able to read a newspaper after dark without straining his eyes. Today, however, he would find it almost as difficult to exist without electricity as without water. Both in his day-to-day living and indeed in the very ways that he makes his living, he has placed unshakeable confidence in three vital facts:

Electricity is **there,** wherever he lives. Electricity is **abundant,** whatever his need. And electricity, by any test, is the **cheapest** source of labor at his disposal.

We have already discussed in this series how it is that electricity gets **there** and is abundantly available. The area coverage principle is responsible *(Caro-*

Lina Farmer, November, 1953). We have also discussed how, operating on the non-profit principle, the electric membership corporations bring this service to their members at as near its actual cost as possible *(Carolina Farmer,* December, 1953). But how, you may often have wondered, does an electric cooperative determine what part of that actual cost **each** member should pay? We have already seen, in the example of the housewife's laundry and her husband's fire emergency, that it is impossible to charge for service on the basis of how useful it may be to given individuals. What, then, is the principle upon which each member, having dutifully sent in his meter reading card, receives a bill for a certain amount every month?

It is this: Each member pays his **fair share** of the **total** cost of furnishing service to **all** the members. And that fair share is measured by the **proportion of all the electricity sold which he himself has used.** This is a principle which makes perfect sense.

Cooperative consumers look to their electric enterprises for but one thing: electric service. As we have seen in analyzing the area coverage principle, no single family can get power unless many families do. Thus, all members have an **equal interest and purpose** in joining the cooperative, regardless of how they put its services to use. The sole standard, therefore, that is fair, workable and logical in determining what each member pays is simply that each pays in proportion to his use.

There are, of course, exceptions to which this principle cannot and should not apply. For instance, there is the exception of the minimum bill; it requires a member to pay a given small amount each month whether he uses the kilowatt-hours that such an amount would buy or not. Ordinarily there is also another exception—the different rate schedule on which a few of the cooperative's members are billed.

Exceptions to Principle

But it should be emphasized that both of these instances are exceptions, exceptions which are necessary for very good reasons.

The minimum bill is an exception, because, though virtually all the cooperative's members are subject to it, only a small proportion of them are actually affected by it. It is necessary because the operation of an electric system would not be possible unless a certain minimum of revenues were somehow assured every month. A cooperative is a going enterprise, requiring large expenditures in operation costs monthly. Unless each member agrees to provide a guaranteed minimum of revenue every month, the system could never be built in the first place, much less operated on a sound basis in the second place.

The existence of the minimum bill is more than offset by another feature of every electric membership corporation's rate schedule: As a member's use of kilowatt hours goes up, the price of each kilowatt hour comes down. Why? Simply because, as a rule, the larger amount of available power consumed, the more efficiently the cooperative can operate. Just as you don't build an electric system to serve one family, neither do you build one with only enough capacity to furnish 25 kilowatt hours of current to each family per month. The nearer, therefore, that the members' demand for power comes to equalling the system's capacity to provide it, the cheaper the operation of the system becomes.

That most electric cooperatives have different rate schedules for different types of members is a well known and understandable fact. The vast majority of cooperative members in North Carolina represent farm, or rural residential, consumers. But most cooperatives serve a few other type consumers —little factories, cotton gins, mills,

(Continued on Page 18)

Power line maintenance (right) is one of the heaviest expenses of operating a rural electric cooperative. Such expenses are paid by members on the basis of the amount of power they use. Each pays his share of the total cost of service.

—Farm Groups Take Power Stands—

Grange and Farm Bureau pass conflicting convention resolutions

Two of the nation's three largest farm organizations met in convention near the end of 1953 and took a look at rural electrification problems. The National Grange assembled in Burlington, Vermont, November 10-20, and the American Farm Bureau Federation met in Chicago, December 14-17.

Each group hammered out its stand on controversial power issues. Largely they followed previous stands, but in one or two instances the proposals were new. One of the biggest surprises was Farm Bureau's failure to take a stand on proposals that the interest rate on REA loans be raised.

Following is a summary of the resolutions, along with the editorial stands of **The Carolina Farmer** on each issue:

REA Loan and Administrative Funds

The National Grange:

Congress (should) make available annually sufficient loan authorizations and administrative funds to insure the continued progress of the Rural Electrification Program, so that extensions can be made into the unserved areas, and the existing systems modernized to meet increased energy demands.

Farm Bureau:

Where further expansion or improvement is contemplated serious consideration should be given to the possibility of seeking funds for the program from members of the cooperative on an investment basis. If revisions in legislation or regulations are needed in order to permit such procedures, we will support the necessary changes.

The Carolina Farmer:

The record of achievement of rural electrification is such that Congress should continue to make available all needed funds for the carrying on of this program and to enable cooperatives to do whatever is reasonably necessary to provide low cost electric service in abundance.

Interest Rate On REA Loans

The National Grange:

The National Grange oppose(s) any proposal to increase the long-established interest rate of two per cent (2%) per annum on REA loans.

Farm Bureau:

No stand taken on this issue.

The Carolina Farmer:

The Government has lost no money on REA loans. It would be both unfair and unsound to increase the present interest rate of two per cent.

The Proper Function Of REA

The National Grange:

The basic Rural Electrification Administration law (should) be left as it is. REA should have funds to extend research in methods of improving electric service and putting that service to effective use.

Farm Bureau:

REA should be considered primarily as a credit agency. As such it should not perform any operations or services beyond those normally performed by other lenders.

The Carolina Farmer:

REA is basically a bank from which electric cooperatives borrow money. Certain technical assistance and research programs are desirable and should be considered proper duties of REA as a responsible lender.

The Preference Clause And Disposal of Federal Power

The National Grange:

We are opposed to elimination of the preferential clause for cooperatives, public utility districts, and cities in purchase of power from Federal projects, and are opposed to provisions for delivery of power from Federal projects at the bus bar only.

Farm Bureau:

Cooperatives and municipalities should have the first opportunity to purchase Federal power. . . . We favor sale of power at the plant (bus bar) to private enterprise, cooperative or non-cooperative, or to states or political subdivisions thereof who are able and willing to transmit and distribute such power on an equitable basis.

The Carolina Farmer:

The first opportunity to purchase power produced at public expense should be given to municipalities, cooperatives and other non-profit groups. We are opposed to any proposal which calls for the sale of such power at the bus bar only. The government should be free to market such power in the best interests of the people.

OTHER STANDS TAKEN

The two farm groups took other power stands which cannot be compared. Farm Bureau, for example, went on record as favoring the sale of power generation rights at Federal dams to private enterprise. This proposal is similar to the "Hoover Dam Policy," and would take the Federal Government out of the power business. On the other hand, Farm Bureau passed a resolution supporting TVA.

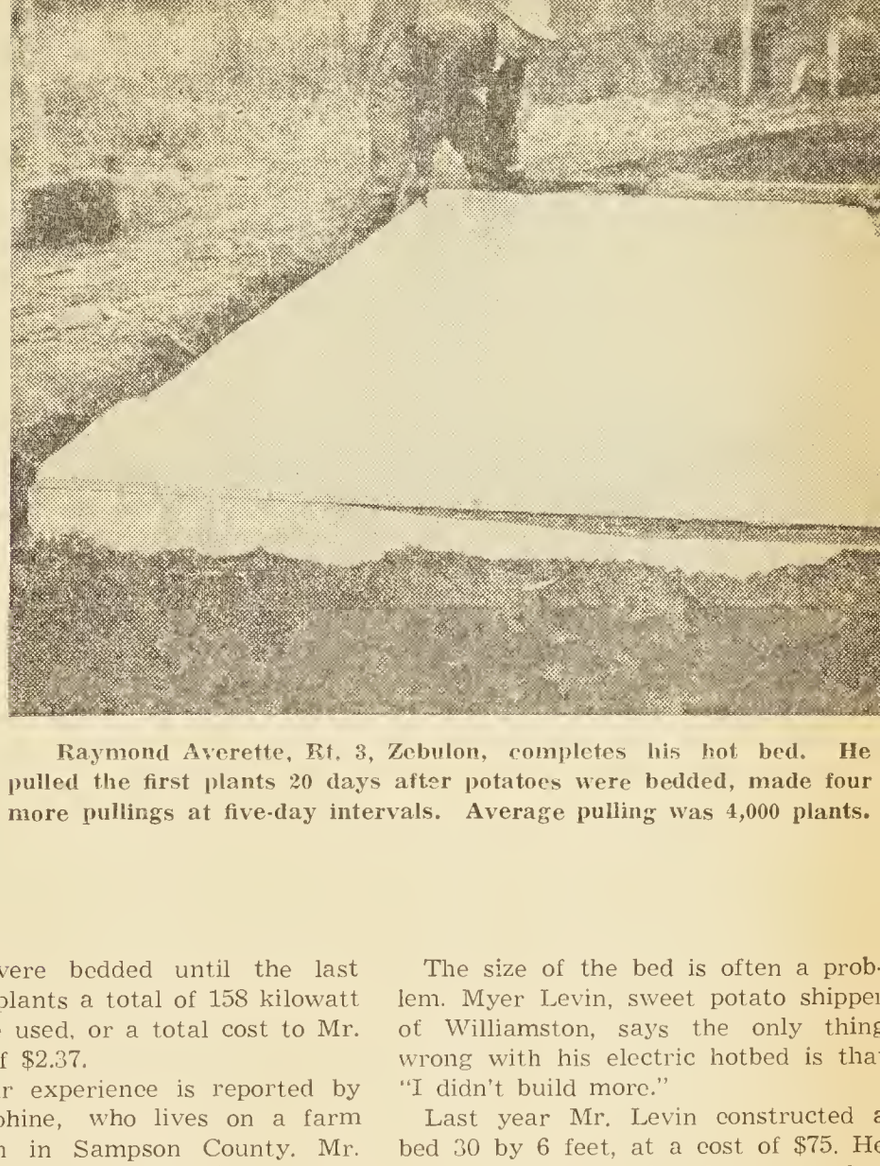
Farm Bureau also said that "a thorough study should be made" of the capital credits system to be sure it "insures ownership and control to the members. In the meantime . . . immediate action should be taken to make the equities of members transferable by the owner of shares of the capital credits on the books of the cooperative at any time."

Rural electrification leaders puzzled over the failure of Farm Bureau to call for adequate REA loan and administrative funds. The resolution calling for members to furnish capital for expansion on an investment basis seemingly indicates that the organization favors a sharp reduction in REA loan allocations.

Both organizations asked telephone companies to refrain from "cream skimming" in rural areas and urged fair interconnection agreements. Farm Bureau said the REA policy of requiring 100 per cent mortgage contracts from telephone companies is "unrealistic and unjustified" and goes beyond the "reasonable protection" provision in the REA Act.

The experiences of these three North Carolina farmers indicate that for higher production and profits, there's nothing like

ELECTRIC HOTBEDS



Raymond Averette, Rt. 3, Zebulon, completes his hot bed. He pulled the first plants 20 days after potatoes were bedded, made four more pullings at five-day intervals. Average pulling was 4,000 plants.

The North Carolina Extension Service reports that more and more farmers are turning to electricity to heat plant hotbeds. The result is an earlier plant that virtually assures higher market prices.

The idea of using hotbeds is not new, of course. Truck farmers have used manure beds for years because their business requires them to get every possible advantage over their competition. And the biggest advantage they can have is an earlier maturing crop. These farmers were among the first to use electricity for heat, and general farmers were not long in following their example.

And there is no doubt about what the electric hotbed can do. Take Raymond Averett of Rt. 3, Zebulon, for example. Last year he was determined to try an electric hotbed. Delays in getting material resulted in the sweet potatoes bedded in the electric bed being two weeks behind those in his ordinary cold beds. But in spite of this all of the plants were ready to pull at the same time.

He pulled his first plants in the electric hotbed 20 days after the potatoes were bedded. After that he was able to pull plants at five-day intervals four more times, averaging about 4,000 plants per pulling. He reports that he had to wait 10 days between pullings in the regular beds.

The Wake Electric Membership Corporation, which serves Mr. Averette, installed a test meter to record the bed's power consumption. From the time the potatoes were bedded until the last pulling of plants a total of 158 kilowatt hours were used, or a total cost to Mr. Averette of $2.37.

A similar experience is reported by Jarvis Alphine, who lives on a farm near Dunn in Sampson County. Mr. Alphine installed a 15-foot sweet potato hotbed at a total cost of $47, which included electric cable, bed frame and cover, and other electrical equipment.

The bed was installed on March 14. Five weeks later, on April 20, the first plants were ready for pulling. A second pulling was made one week later and a third was made on May 4. A total of 245 plants were produced on each square foot of the bed, or 2,940 plants per bush. The entire bed produced 22,000 plants in seven weeks.

Comparison With Cold Bed

Two weeks after the electrically heated bed was installed, a 15-foot cold frame bed was constructed nearby. In contrast to the reverse circumstances on the Averette farm, this bed produced only one pulling with less than 11,000 plants. This led Mr. Alphine to remark: "There was no comparison between the beds. We liked our electric hotbed very much and we plan to double the size of it this year."

The size of the bed is often a problem. Myer Levin, sweet potato shipper of Williamston, says the only thing wrong with his electric hotbed is that "I didn't build more."

Last year Mr. Levin constructed a bed 30 by 6 feet, at a cost of $75. He was very pleased with the results, but found that it was too small to supply plants for a commercial venture. He is remedying that this year.

Cost of Hot Bed

The farmer who is inexperienced with hotbeds often thinks the cost of materials is too high, but the initial cost is small when the benefits are considered over a period of 10 to 15 years. State College experts say the overall operation of the hotbed, including depreciation, should not exceed 10 cents per square foot for each year.

This is the time for farmers to begin planning hotbeds for this year. County agents are qualified to give detailed information about both the construction of beds and the proper bedding techniques. Additional information along with blueprints and detailed construction plans, may be secured by writing to the Extension Agricultural Engineer, North Carolina State College, Raleigh, North Carolina.

Tests conducted by the Department of Agriculture prove conclusively that

Electricity is More Efficient Than L

ACCORDING TO an announcement made recently by the Competitive Fuels Subcommittee of the National Electrical Manufacturers Association Farm and Rural Market Development Committee, electric ranges, refrigerators and water heaters proved more efficient than comparable bottled gas appliances in a series of scientific and unbiased relative utilization efficiency tests conducted by the Government's top housing and household equipment specialists.

These recently completed authoritative tests were conducted by the Housing and Household Equipment Division, Bureau of Human Nutrition and Home Economics, United States Department of Agriculture, at the Agricultural Research Center, Beltsville, Maryland.

The appliances used in the tests were manufacturers' current production, moderate-cost types, which are generally available. The tests lasted the better part of a year.

These comparative utilization efficiency tests were conducted for two reasons: (1) to lay at rest the many claims and counter-claims which have resulted from outdated utilization information, and (2) to provide needed new utilization information to help homemakers decide whether to buy electric or bottled gas appliances. Many times that choice depends upon operating costs, a factor so often determined by how efficiently electric and bottled gas appliances cook, refrigerate, and heat water.

Before looking at the results of these tests, one must know just what utilization efficiency means and how it is determined.

Utilization efficiency simply means the relation between the useful work done and the energy required to do it. Given the same unbiased and objective tests, the relative efficiencies in the use of any two "fuels," such as electricity and bottled gas, can be accurately compared in performing identical tasks. The ratio between the efficiencies obtained in performing the same tasks is called the utilization efficiency ratio.

The energy unit used by the Bureau of Human Nutrition and Home Economics in determining efficiency ratios of electric and bottled gas equipment is the British Thermal Unit—BTU. The electricity and bottled gas used were measured in kilowatt-hours and in decitherms, respectively, and converted to BTU from which efficiency ratios were calculated. The types of appliances, electric or bottled gas, which used the fewest number of BTU for each job were the most efficient.

(A complete report of these tests has been published by the Bureau of Home Nutrition and Home Economics in its Technical Bulletin, No. 1073, October, 1953, "Comparative Utilization of Energy by Household Electric and Liquefied Petroleum Gas Ranges, Refrigerators and Water Heaters." Should more detailed information than the summary presented here be desired, a copy may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.)

Following is a summary of these new tests; comparisons of the energy used by electric and bottled gas equipment in doing identical refrigeration, cooking and water-heating jobs, under the same conditions.

Refrigerators

The Tests—Refrigerator tests were conducted in a special room where temperatures could be maintained at 70, 90, and 100 degrees Fahrenheit. Eight and nine cubic foot electric and bottled gas refrigerators were tested. All of them had across-the-top frozen food compartments. As in all the studies, both the electrical and bottled gas industries were consulted during the progress of this study.

The Results—Electric refrigerators used an average of 3,744 BTU per day. Bottled gas refrigerators used an average of 43,556 BTU per day. Electric refrigerators were found to top bottled gas refrigerators by an efficiency ratio of 11.6 to 1.

Electric refrigerators outsell bottled gas refrigerators many times over. Why? Because prospective buyers, in doing research on the product to be purchased, have found that electric refrigerators are dependable, clean, safe, economical (the modern sealed refrigerator unit eliminates seasonal oiling, can be plugged into any appliance receptacle, needing no special piping and connections, and does not have to be manually relighted), and efficient.

(Ask your co-op for your electric rate an
tables to com

Comparative C

Table 1

Cost Per Kwh	Family of 3 (100 Kwh)	Family (120 K
1.5	$1.50	$1.80
2.0	2.00	2.40
2.5	2.50	3.00
3.0	3.00	3.60
3.5	3.50	4.20

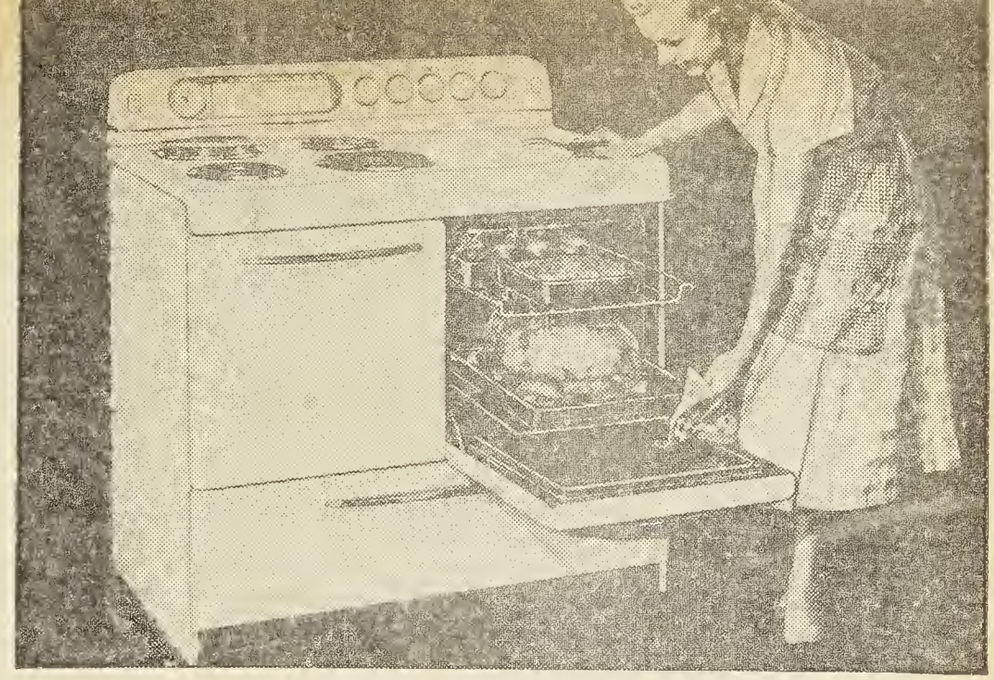
Table 2

Cost, Based on Esti

Cost Per Lb.	Family of 3 (49 lbs.)	Family (58 lbs
3.0	$1.47	$1.74
5.0	2.45	2.90
7.0	3.43	4.06
9.0	4.41	5.22
11.0	5.39	6.38
13.0	6.37	7.54

Conversion ratio: 4.24 lbs.—

P-Gas



In range test, efficiency ratio was 2 to 1 in favor of electric range.

Ranges

The Tests—All of the bottled gas ranges used in the range tests had double-throat burners. Electric ranges were equipped with surface units which are representative of the types in use today. Menus were worked out by the staff of the Bureau of Human Nutrition and Home Economics. Light, medium and heavy meals were cooked, according to farm family practices and established nutritional requirements. For eight days of cooking, following are the results.

The Results—For top-of-range cooking, electric ranges used an average of 57,201 BTU; bottled gas ranges, with constantly burning pilots (as normally used in the home) used an average of 114,233 BTU.

For oven cooking, electric ranges used an average of 63,007 BTU; bottled gas ranges, an average of 134,473 BTU.

For combined top-of-range and oven cooking, electric ranges used an average of 120,208 BTU; bottled gas ranges, an average of 248,706.

From these tests, the Bureau found that for top-of-range cooking, bottled gas ranges used from 1.60 to 2.34 times as much energy as electric ranges; for oven cooking, bottled gas ranges used from 1.89 to 2.48 times as much energy as electric ranges. The tests proved that, for the complete cooking job (top-of-range and oven), electric ranges used half as much energy as bottled gas ranges. The efficiency ratio was 2 to 1 in favor of electric ranges.

(For more detailed information on electric cooking and for results of a comparative L-P gas and electricity demonstration viewed by a North Carolina co-op home economist, see the *Carolina Farmer,* September, 1953.)

Water Heaters

The Test—Electric and bottled gas water heaters were subjected to carefully controlled engineering tests in a constant temperature room. Tank capacities of each type were selected according to usual industry practices. Comparable units tested, therefore, were electric water heaters of 66-gallon storage capacity, and bottled gas water heaters of 30-gallon storage capacity.

Three different test schedules were followed. One was a 38-gallon drawoff test to simulate the amount of hot water used for everyday household tasks. The second was a 78-gallon drawoff test to simulate the amount required for heavier household use. The third, a 112-gallon drawoff test, was in accordance with the laboratory test schedule specified by the American Standards Association. Each time incoming water at 60 degrees Fahrenheit was heated to 160 degrees to obtain the 100-degree temperature rise specified by the American Standards Association.

The Results—To supply 38 gallons of hot water, electric water heaters used an average of 40,006 BTU; bottled gas water heaters, an average of 79,643 BTU. To supply 78 gallons of hot water, electric water heaters used an average of 71,651 BTU; bottled gas water heaters, an average of 121,962 BTU.

For water heating, electric water heaters proved more efficient than bottled gas water heaters by efficiency ratios ranging from 1.6 to 1 to 2 to 1 in the three engineering tests.

A Summary of the Test

Summing up the test results, electric equipment proved more than 11 times as efficient as bottled gas equipment for refrigerating; twice as efficient for water heating.

The highly competent staff of the Bureau of Human Nutrition and Home Economics checked and rechecked all results obtained in these tests. The Bureau's findings, therefore, represent the latest and most authoritative "word" on a subject which, for years, has created too much confusion for too long in the minds of rural homemakers. Establishment of the new utilization efficiency ratios should dispel such confusion, particularly since the ratios were determined by a Government agency dedicated only to fair practices and the welfare of rural people.

as dealer for gas rates. Then use these costs.)

king Costs
lectricity

Family of 5 (130 Kwh)	Family, 6 up (140 Kwh)
$1.95	$2.10
2.60	2.80
3.25	3.50
3.90	4.20
4.55	4.90

LP-Gas
ed Average Use

Family of 5 (63 lbs.)	Family, 6 up (68 lbs.)
$1.89	$2.04
3.15	3.40
4.41	4.76
5.67	6.12
6.93	7.48
8.19	8.84

Gwyn B. Price Accepts Position on REA Policy Advisory Committee

Gwyn B. Price, Chairman, North Carolina Rural Electric Authority, Raleigh, was recently named by REA Administrator Ancher Nelsen to serve on a 17-man REA Policy Advisory Committee. The newly-formed committee held its first meeting December 28-29 in Washington, D. C.

Immediately following the meeting of the committee with Nelsen and Assistant Secretary of Interior Fred G. Aandahl, a spokesman for the group announced on December 30 that it would cooperate with the Administrator in working out such problems as the effect of Interior's new power marketing criteria on the power supply of rural electric cooperatives.

Although NRECA (National Rural Electric Cooperative Association) had been advised earlier that the new Power Advisory Committee would appear at hearings to be held by the House Interior and Insular Affairs Committee on the criteria December 29, members of the advisory committee, composed in large part of NRECA officers and directors, did not accompany Nelsen to the hearings.

Spokesman is Optimistic

T. E. Craddock, Seymour, Texas, secretary-treasurer of NRECA, the committee's spokesman to the press, said, "We are happy to work with the Administrator on questions he is not familiar with, . . . The committee meeting has been interesting and congenial. Much good work will come from it and from future meetings. Discussing common problems with our feet on the floor, by and large, we can come up with amicable answers for electrification of rural America."

Asked by reporters if the committee had arrived upon a definite conclusion regarding the marketing criteria for the Missouri Basin, Craddock replied, "The committee is still discussing the criteria with Assistant Secretary of Interior Fred G. Aandahl. We have not yet gone into additional changes, which we will discuss with Mr. Aandahl later this afternoon.

Pressing the question further, a reporter asked Craddock if he viewed with alarm the financial position of marginal co-ops.

"We do not feel there is any serious reason for alarm," Craddock said. "Measures can be taken to change the financial picture of close-operating co-ops. We plan to give a lot of thought to this problem and discuss it thoroughly during our meeting," he added.

Nelsen said that his idea for remedial treatment to close-operating co-ops was to concentrate REA loan security assistance there. As for the marketing criteria, Nelsen said that there is presently a closer working relationship existing between REA and the Department of Interior than has ever before existed. Interior is in complete agreement that there should be a liason between the committee and the Department to assist on rural electric co-op problems, he said.

REA Will Loan for G-T

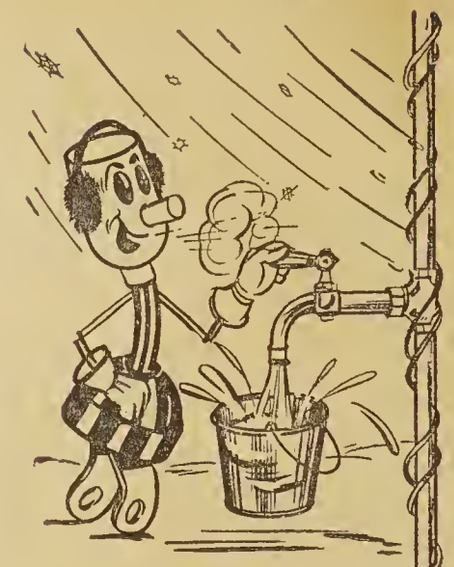
Questioned on REA financing of generation-transmission facilities in areas where Federal power is not sufficient to meet the needs, the Administrator said that REA would make loans for G-T facilities, "But we will encourage existing facilities to expand to meet the area needs first."

The committee passed no resolutions nor did they make any specific statements of opinions, except those by Craddock. In approaching problems all opinions will be considered, according to Nelsen. He announced that the committee would meet in Miami, Florida, at the NRECA meeting, January 11-14, and two or three times annually.

"The Advisory Committee," Nelsen said, "paid its own expenses at the meeting, and will continue to do so in the future. We cannot legally buy them a dinner."

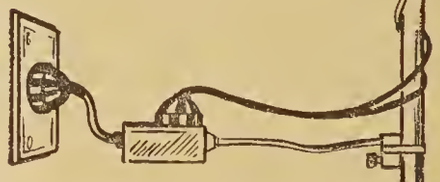
"He's like this once every week. He figured by his income tax that he works one day out of every week for the government."

"Willie Wiredhand" SAYS



Exposed water pipes can now be protected in freezing weather with new electric heating cable. Wrap cable around pipes or strap it on parallel for quick, easy, installation.

Save faucets, valves and pumps from freezing and sprinkler systems too. Cable comes in many lengths from 6 feet to 120 feet rated from 20 to 800 watts.



Also use heating cable for roof de-icing—to prevent shingle damage—surface heating — for poultry houses—for soil heating—to give plants an early start in hotbeds, cold frames and greenhouses.

Thermostats save kwh consumption for pipe and soil warming.

See your rural electric system or dealer for advice on how you can make use of this new money saving use of electricity.

Copyright, 1953, by National Rural Electric Cooperative Association

The Farm vs. Polio

A REGISTERED Hereford bull bought six iron lungs for stricken polio patients. A 37-pound turkey paid for a week's hospitalization for a young polio victim. Three carloads of apples raised the money for 10 rocking beds to help wean polio patients out of iron lungs.

It's all part of a spontaneous new fund-raising technique for the March of Dimes. You could call it "The Farm Versus Polio." From coast to coast, farm and fruit growers' associations have found that it is fun to fight polio by donating crops and livestock and having them auctioned off for the March of Dimes. Costs of the auctions are contributed by those taking part in them.

For the 1953 March of Dimes, three carloads of Delicious apples donated by growers in the Okanogan region of Washington were auctioned for $13,000 in New York City. The cars crossed the country bearing huge signs saying, "These are March of Dimes Apples . . . Give to the March of Dimes."

Potato growers in the Red River Valley of North Dakota and Minnesota gave five carloads of potatoes. These were auctioned in Chicago, Peoria and Minneapolis and the March of Dimes was $16,000 ahead.

Bull Auctions Net $31,000

In Red Bluff, Calif., a registered Hereford bull contributed by a local breeding association raised $10,100 to aid in the fight against polio. This brought to a total of $31,000 the amount raised for the March of Dimes through bull auctions alone in Red Bluff.

Turkeys were donated by the New York State Turkey Growers Association and one 37-pound bird was auctioned off to a hotel owner in Albany for $185.

Cotton given by Southern California growers brought more than $20,000 at March of Dimes auctions. Even bigger auctions are planned for the current campaign.

Some of the tobacco you smoke may have come from "Operation Burley" in Lexington, Ky. Tobacco growers in the area were delighted to contribute a "hand" or a "stick" of tobacco each when they brought their crops into warehouses for auction. Pretty matrons collected the contributions in wheelbarrows, whence they were loaded on a truck and taxied to a central warehouse for a special March of Dimes auction. More than $10,000 was raised in 1952 and 70,000 pounds of donated tobacco brought even more in 1953. Many of the 5,000 farmers who participated had children who had been stricken with polio and had been helped by their local National Foundation for Infantile Paralysis chapter.

From lambs to onions—from oranges to horses—the pattern of large auctions of agricultural products is being repeated throughout the country. One of the auctions involved a burro in Colorado.

A new entry, in the non-farm category, has been promised for next year as the oil producers in Western North Dakota plan a "Petroleum for Polio" program. There's talk of a coal auction in West Virginia.

Officials of the National Foundation for Infantile Paralysis in New York welcome the extra funds raised by this technique. This year the slogan is 50% more in '54. The new polio prevention program will cost $26,500,000 in addition to the regular March of Dimes expenses: aid to patients, scientific research and professional education.

* * *

Since 1938, the March of Dimes has aided 270,000 polio patients (four out of every five cases) and spent a grand total of $174,000,000 for patient care.

Why Did We Change?

By Kirby Able, *Editor*
South Carolina REA Co-op News

CHRISTIAN PRINCIPLES were the foundation stone of this nation of ours, and traditionally Americans have found their love of country close akin to that of devotion to God.

But in recent years evil forces have been chipping away at our foundation stone, and the shifting sands of foreign isms are settling around our patriotism.

Deep emotions like religion and patriotism today are a thing to hide. It's just not stylish to bend a knee in prayer or to wave a flag in public.

Why? What has caused Americans to change? I don't know.

But I can remember when I was a little runny-nosed boy in the first grade. Before I learned the alphabet I learned the pledge of allegiance; before I learned to read I learned to recite verses of the Bible.

And every day before learning started, we stood and had prayer. We followed this with the pledge to the flag of the United States of America.

My first grade school was a little two-room wooden building heated by a pot-bellied stove and we had a bucket and dipper for drinking water.

But in that school we learned a spirit of reverence and the seed of patriotism was planted and nourished. And because of that training I am still moved by the Lord's Prayer and I get shivers up and down my backbone when I hear the pledge of allegiance.

We learned that to be elected to public office was just about the finest thing that could happen to a man. To see a Senator or Congressman was to be in the presence of greatness.

To have seen a President of the United States was to be placed on a pedestal. A picture of Christ and a picture of the current president, along with the American flag, adorned the walls of the school.

To us, America was the promised land and we were highly privileged to be its future citizens. It was impossible to think of anybody not feeling the same way, or to think that anybody would want to change it.

We didn't worry about socialism or communism. We didn't need to worry about it for we were Americans.

Republicans and Democrats had differences about such things as the tariff, but nobody doubted that all Republicans and Democrats were good Americans.

Abraham Lincoln once said that one of the functions of government was to do for the people things they could not do for themselves.

And since my early days in school, Lincoln's thought on this has entered more and more into the American concept of government. These changes have probably been brought about quicker because of wars and depressions which necessitated faster and more economical production of food and fiber for the protection of our way of life.

Frozen Stock Watering Tanks Mean Lower Production, Fewer Profits

WATER IS one of the most important things required by poultry and livestock. For eggs, milk and meat are made up largely of water. It is essential, therefore, that it be made available on the farm on a year-round basis, if production levels are to be maintained.

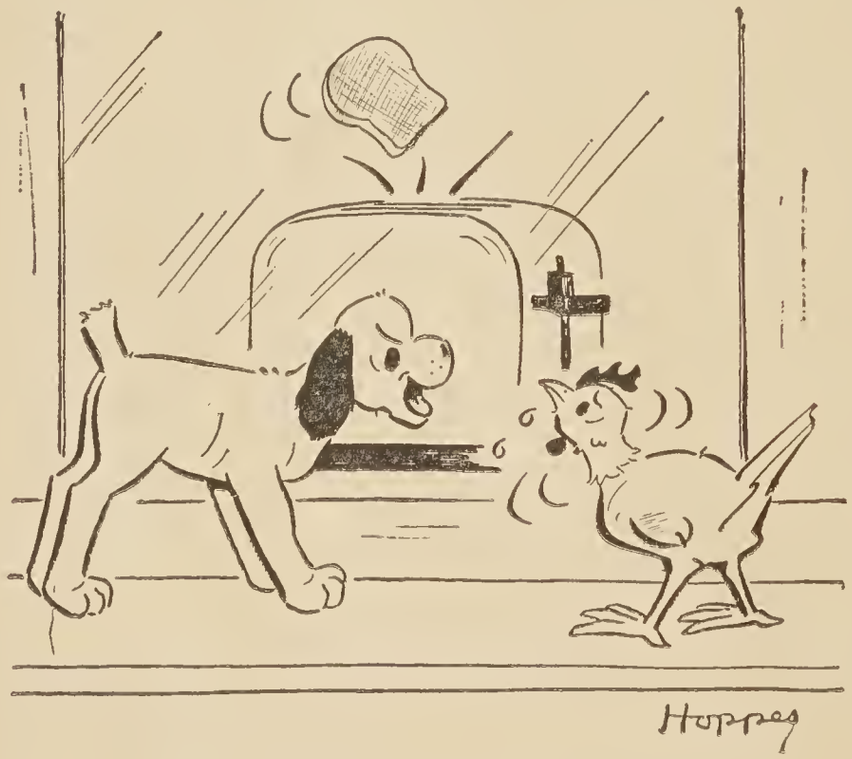
In some parts of North Carolina this creates something of a problem. Winter is no respecter of stock tanks. For it causes ice to freeze on them just as readily as on the old mill pond. And cattle don't like ice in their drinking water. The chill and pain of cracked ice in their throats discourages them from drinking the amount necessary for putting on weight or producing milk. Laying hens react the same way. Ice in the poultry waterers means fewer eggs in the nests.

Various sources of heat have been tried to combat the farmer's winter watering problems. The newest of these is electricity. Safe and effective, electric water warmers provide thermostatically controlled heat without personal attention.

There are three types of electric water warmers: immersion heaters, of 1,000 watts or more, which warm all the water in the tank; 800-watt deicers, which float on the surface of the tank and keep ice from freezing around a sizable drinking hole; and heated drinking cups.

The latter device, looking somewhat like a large pipe, contains a drinking bowl similar to that used in dairy barns. Inside and immediately under the bowl is a thermostatically controlled heating unit. The water pipe is protected by a heating cable. The flow of water is controlled by a treadle, which stock push down when they want to drink.

Winter watering problems for poultry are solved, generally, through a combination of pressure water systems, heating cable and immersion heaters. Pressure water systems keep the water flowing into the poultry house, while exposed pipe lines and connections are kept open throughout cold weather through the application of thermostatically controlled heating cables. Immersion heaters prevent ice from forming in fountains and drinking troughs.



"And when you're done cookin', you'll pop out of the roaster, just like that!"

Marshall to Morehead

(Continued from Page 3)

fashionable to prove reckless charges. A single, spiteful little man can make a speech or write a letter and the damage is done; if he is challenged, he can retreat behind a curtain of ignorance. No amount of proof can ever completely remove the suspicion he has created. The glue of a label sticks hard and fast.

A few years ago we would have been amazed and stunned to have heard such malicious charges hurled against so fine an American. But today, in a generation in which General George C. Marshall can be accused of treason on the Senate floor, we have become hardened. Kirby is, at least, in select company: it even includes a former President of the United States.

That's the immediate background of the man whose words you'll read on page 18. We think you'll agree that America could use a few more "dangerous" men who can experience such feelings and express them so well.

Payment According to Use

(Continued from Page 11)

churches, schools, etc. For these, different rate schedules are usually provided—schedules which take into account both the nature of these members and the decided increase or decrease in operating efficiency which furnishing service to them represents.

But the basic principle, for all practical purposes, is uniformly respected: If it costs your cooperative $100,000 to operate in a given year and you, as a residential consumer, used one per cent of all the kilowatt hours the co-op sells, you will, in the long run, pay a total yearly bill of $100, or roughly $8.33 a month. If you use one per cent of the cooperative's total service, you pay one per cent of the total cost of service.

It's a principle that not only makes sense, but puts the democratic ideal into realistic financial practice.

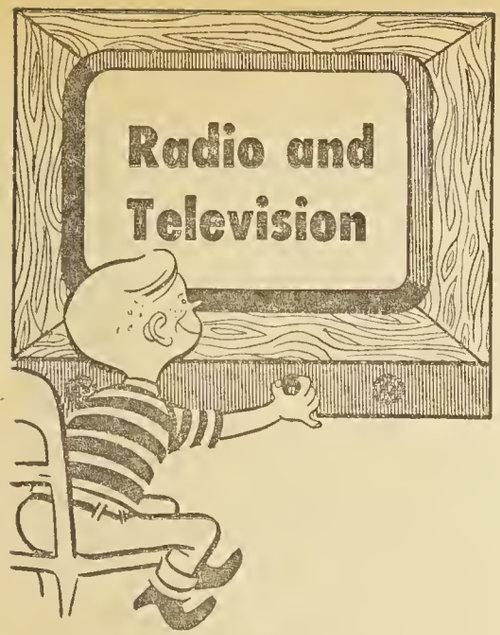
Care of Farm Ponds

(Continued from Page 9)

April and repeated whenever the water begins to clear.

Weeds not mentioned above will usually respond to one of the control methods described. It should be emphasized that not all water plants are bad weeds.

Chemicals should not be used during the winter months when water is cold. They are most effective when the water warms in the spring.



Bergen, McCarthy to Star in Video Show

Edgar Bergen, with his popular wooden-headed dummy, Charlie McCarthy, has finally surrendered to television. The ventriloquist, who has nodded "no" to video for the past three years, signed late in December to do four Kraft Theater video shows in 1954, along with a weekly radio show for the same sponsor.

Bergen says his radio show will be a change from television, with plenty of soothing music and chatter.

Benefits of Plastic TV Cabinet Discussed

John Bachner, chairman of the committee on large plastic moldings of the Society of the Plastics Industry, said recently that more and more radio and television sets are being produced in plastic cabinets because this type of cabinet eliminates worries about cleaning, scratching, or warping due to heat.

The plastic authority advised that plastic cabinets are made of high strength thermosetting plastics such as those used for electric iron handles and telephone handsets. Once molded under heat and pressure, these plastics "cure" and then retain their shape indefinitely without warping or sag, even when placed near a steam radiator.

Bachner also explained that there are no joints in plastic cabinets to split or catch dirt, since they are molded in one piece.

These advantages have been listed by Bachner for plastic cabinets:

They won't peel or crack in sunlight.

They aren't hurt by water, and can be cleaned with plain soap and water or waxed for luster if desired.

Conversation, Psychology Featured On Popular Daytime Radio Program

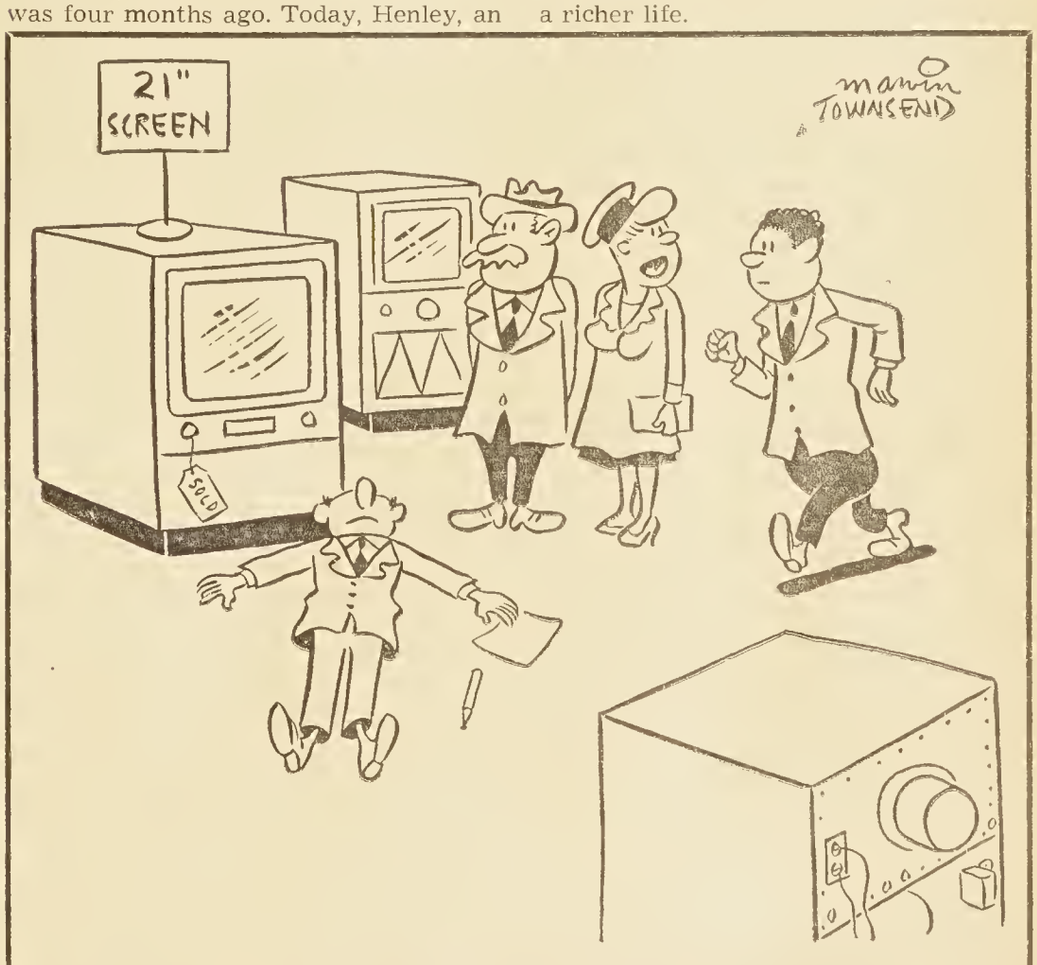
"Never underestimate the intelligence of the audience," is the motto of young Arthur Henley, 31-year-old radio producer whose new CBS program, "Make Up Your Mind," has become one of the top half-dozen daytime radio shows within weeks after its inception.

The show is unique. A panel of four, including one guest celebrity, tackles make-believe problems in human relations—some serious, some funny, many likely to happen to anyone, but all stimulating. After the panelists have discussed the situation, an accredited psychologist gives his or her professional views on the subject. Master of ceremonies Jack Sterling ties the whole show together into a neat, dramatic 15-minute package. The program— the first commercial radio show to feature psychologists—is broadcast every day, Mondays through Fridays, at 11:30 a.m., EST, over the CBS Radio Network.

Many important people in the radio industry shook their heads and said the show would never click. "It's over their heads," chuckled the wise ones. That was four months ago. Today, Henley, an idealist with a fixed idea, is a successful owner-producer-director.

Behind Henley's remarkable success story lies a long career as a writer, director and producer of radio and television programs. He broke into radio when, as a student at Far Rockaway (N. Y.) High School, a script of his won a Scholastic magazine award. The letter of acceptance was delayed until the day before the broadcast because his teacher-advisor was indisposed, so young Henley was forced to direct the show and play five parts. His writing credits are many. He has turned out scripts for Kate Smith, Sammy Kaye, Garry Moore and Paul Winchell.

Henley's "Make Up Your Mind" is based on two ingredients; his love for the art of conversation—the program is basically a series of spirited conversations—and his belief that life is full of decisions, some trivial, some momentous. "Should I get married? Should I wear a raincoat today? Should America drop the Atom bomb?" With this in mind, Henley has created a program which furnishes millions with entertainment plus a priceless ingredient, a design for a richer life.



"All I said was 'It's all right to deliver next week'."

The Carolina Homemaker

Edited by Rebekah Rivers

Let's Talk About Teens

Nutrition survey shows that

We Need to Look at Teen-Age Eating Habits

ARE YOUR teen-agers getting enough of the proper foods to insure them good health, proper growth, stable dispositions, long useful, active years? Dr. Pauline Beery Mack, of the Ellen H. Richards Institute of Pennsylvania State College, says they probably aren't. Dr. Mack has, over a period of ten years, conducted a mass nutrition study of the American teen-ager—and the results were sometimes shocking.

A look at the statistical report of this study arranged by the Good Luck Division of Lever Brothers, shows that something should have been done about teen-age nutrition years ago. Warning signs were posted for years in rejections by the Armed Forces, in medical and dental clinic findings, or in personal tragedies. It is hard to understand this blind spot in our nutrition thinking, particularly in view of all the emphasis that has been put on the teen-ager during the past years. It's true that your fifteen-year-old son is schooled in proper nutriton in his high school classes, but a "this-is-good-for-you" often falls on deaf young ears. So, once again, the health care of the child is bounced back to the mother.

Dr. Mack's study shows that, in order to attack this blind spot in the nation's nutrition, interested persons must face and follow through on the following goals: (1) to awaken national interest in the need of better foods for the teens, (2) to provide facts upon which sound teen-age food programs can be developed, (3) to enlist active community cooperation in improving dietary practices of the teens, and (4) to win help and understanding of teen-agers in revamping their eating habits. These goals would be excellent ones for study and action in your community and home demonstration clubs during the new year.

The study made at Pennsylvania College is the largest one ever made on teen-age nutrition. The study dealt with some 3,109 young people, from the city and from the country. Records were kept by teen-agers themselves assisted by their mothers. They kept a record of everything eaten at and between meals. This food was then translated into food values, according to the table of food values set up by the U. S. Department of Agriculture.

Detailed physical examinations were given all the teen-agers, and these tests showed that teen-agers with the poorest physical conditions were those with the poorest food habits. Contrary to general belief, young people from the rural sections of the state were found lacking in proper diets as well as those from the urban centers. Beware of the attitude: "My child eats so much, he must have a hollow leg." He may eat a great deal, but not always of the proper foods.

The findings:

The survey turned up some rather shocking discoveries. As you read them, think of them in terms of your own teen-agers. A disturbing percentage of our teen-agers weer found to be living on seriously poor diets. Far too few boys and girls were found in the group meeting recommended allowances for vital nutrients.

The 13 to 15 age level was found to be the most critical nutrition spot of all. Twelve year olds show poorer records than younger children in the same family. Again and again, the 13 to 15 age group appeared the poorest in their food habits and in their responses to physical tests designed to point out diet deficiency. One of the major reasons for the deficiencies in this group comes from the fact that parents of teen-agers are often concentrating on younger children. Children in this group are given new liberties, and begin cutting out foods they need, heretofore demanded by their parents.

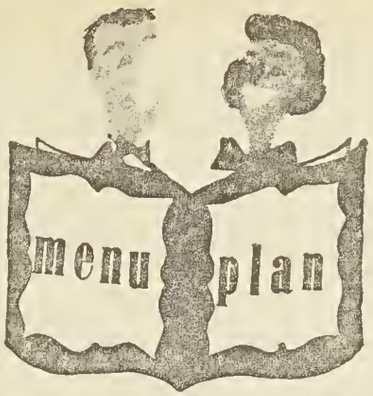
"Not enough to eat" is written boldly on each report of this survey. Only about one quarter of all boys and girls meet the National Research Council's energy recommendations for their respective ages. This means that these young people and probably teen-agers everywhere are not getting enough en-

ergy foods to satisfy needs. Three types of food contribute to the energy needs of the body—carbohydrates (sugars and starches), fats and proteins. When these foods are inadequate, either growth is stumped, or fatique is common.

Deformity, caused by poor diets, was found in nearly 80% of the boys and 70% of the girls examined. Many of these deformities would not be noticed by the eye. With poorer diets, they grow more serious—bow-legs, knock-knees, head distortions, pigeon breast. Only 7 girls and 12 boys with perfect teeth were found among the young people, and poor diet proved to be the basic cause of most faults with the teeth.

And the solution to this condition: (1) a new food pattern for the teens, (2) a better example for the teens, (3) motivation of teen-agers to improve diet, (4) improve nutrition teaching, (5) improved school health examinations (the average health examination is far from adequate), (6) an alerted community. As is the case in solving all common problems, the latter point is of utmost importance. A child's health is a community problem.

The table opposite can serve as an excellent guide for you in preparing and planning your child's meals. Clip it and keep it near you in the kitchen. For detailed information on proper foods, vitamin studies, etc., your county home demonstration agent can supply you with a wealth of information.



HOW MUCH EACH WEEK

	BOYS		GIRLS	
	Age Groups 13-15	16-20	13-15	16-20
	Portions No. Size	Portions No. Size	Portions No. Size	Portions No. Size
Milk	28 ½ pt.	28 ½ pt.	28 ½ pt.	28 ½ pt.
Lean Meat, Fish, Poultry	14 4 oz.	18 4 oz.	12 3½ oz.	14 3½ oz.
Liver or Other Glandular Meats	1 3 oz.	1 3 oz.	1 3 oz.	1 3 oz.
Eggs	5 1 egg	5 1 egg	5 1 egg	5 1 egg
Dried Beans or Peas	4 ½ oz.	4 ½ oz.	3 ½ oz.	2 ½ oz.
Nuts or Peanut Butter	5 2 tsp.	5 2 tsp.	5 1 tsp.	4 1 tsp.
Tomatoes, Citrus Fruits Oranges Tomatoes Juice	20 6 oz. 1 med. 2 small	21 1 med. 2 small 6 oz.	20 1 med. 2 small 6 oz.	20 1 med. 2 small 6 oz.
Leafy Green Vegetables	10 3 oz.	10 3 oz.	9 2½ oz.	9 2½ oz.
Yellow Vegetables	7 3½ oz.	7 3½oz.	6 3½ oz.	6 3½ oz.
Potatoes, Sweet Potatoes*	10 3½ oz.	10 4 oz.	10 2½ oz.	10 2½ oz.
Other Fruits and Vegetables				
Raw	8 3½ oz.	10 3½ oz.	10 3 oz.	10 3 oz.
Cooked	8 4 oz.	10 4 oz.	10 3½ oz.	10 3½ oz.
Juice	7 6 oz.	7 6 oz.	6 6 oz.	6 6 oz.
Flour, Cereals, Breads*				
Cereals	7 2/3 C.	7 2/3 C.	7 ½ C.	6 ½ C.
Bread	48 1 slice	50 1 slice	32 1 slice	21 1 slice
Fats				
Margarine or Butter	28 1 pat	38 1 pat	24 1 pat	21 1 pat
Cooking Fat	As customary		As customary	
Bacon	7 1 strip	7 1 strip	7 1 strip	7 1 strip
Sugar, Syrups, Candy, etc*	10 1 oz.	15 1 oz.	9 1 oz.	

*Amounts can be varied up or down depending on weight and growth progress of the individual.

Advice On Caring for Christmas Poinsettias

In December of 1952, Robert Schmidt, garden expert at N. C. State College Extension Service, prepared an article on the poinsettia. This article proved so popular with Mr. Schmidt's readers that he has revised it for this year's recipients of Christmas poinsettias.—Editor.

The poinsettia has long been a popular Christmas plant but probably few people have given much thought to the fact that it does come into bloom each year only at this season. The so-called blooms are really leafy bracts which color up a brilliant red. The true flowers are the small insignificant yellowish cups found in the center of the whorl of red bracts. The poinsettia is one of a group of plants known as short day plants because it will bloom only in the season of the year with short day length periods, preferably ten hours or less. That is why it is always in bloom during the Christmas season and not during the summer. It could be prevented from blooming now by lengthening the daylight period to 15 hours by means of artificial lights. Flower growers have learned how to bring garden chrysanthemums into bloom any month of the year by using a shading cloth to shorten the days and artificial lights to lengthen the days. The chrysanthemum is also a short day plant.

How can one keep a poinsettia plant until next season? After its usefulness is over, place it in the basement or some dry place where it will not freeze. Do not water it (or as least very little) and let the soil dry up. Next May bring the plant out, cut the stem back about two thirds, wash the old soil off the rots and repot in new soil. From then on handle it like any other pot plant. Sofewood cuttings taken in July

(Continued on Page 25)

Patterns

2931. Bepruffled slip and dress in one pattern to start daughter's new year sewing, with the true grown-up styling little girls adore. Sizes 2-8. Size 4: Dress, 2 yds., 35-in. Slip, 1¼ yds. 35 or 39-in. (Dress also uses two 100 lb. feed bags!)

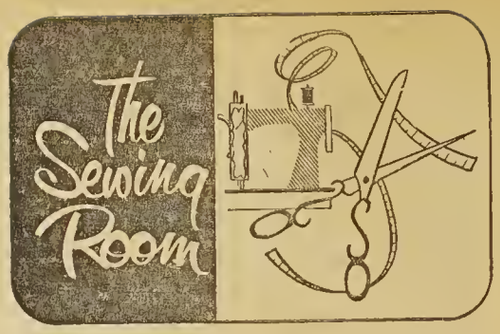
2916. The perfect stay-at-home to sew with V neckline or cookie-cutter edged collar has brief short sleeves and huge carryall patch pocket (optional). Sizes 12-20, 36-46. House dress in size 18: V neck takes 5 yds. 35-in. Trim with ric-rac for smart accent!

2750. In a wide range of extra large sizes, this style is so easy to make in a variety of fabrics for that exciting any-season answer. Sizes 14-20, 36-50. Size 18: 4⅝ yds. 35-in. or 4 1/18 yds. 39-in. Short and three-quarter sleeves included.)

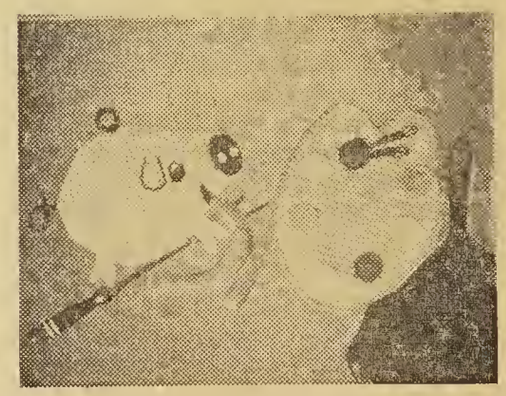
3004. Two special features in this easy-to-slip-into—and easy-to-sew washable! Yoke panel lines are slenderizing the long back pleat provides skirt freedom without bulk! Sizes 12-20, 36-46. Size 18: 4 3/8 yds. of 35-in. Use ric-rac for sparkle!

2543. Petal skirt, scalloped patch pockets make this kitchen cover-all apron pretty as well as practical! Panel lines are figure flatterers! Small, medium, large sizes. Medium apron takes 2 3/8 yds. 35-in. fabric with contrasting or binding trim.

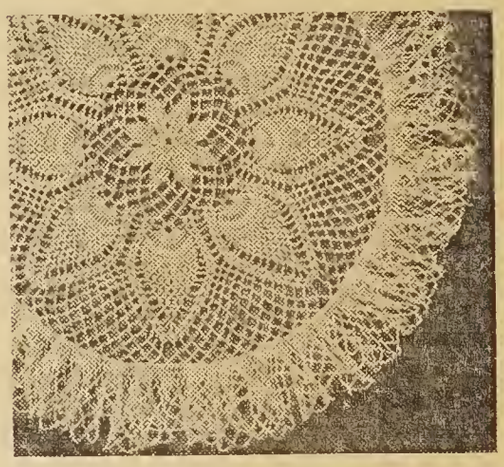
Send THIRTY-FIVE CENTS (in coins, no stamps) for each pattern to: Carolina Farmer, Pattern Department, P. O. Box 42, Old Chelsea Station, New York 11, N. Y. For Fall-Winter Fashion Books, send additional 25c.



FREE PATTERN SERVICE



Two novelty potholders to brighten your kitchen as well as protect your fingers. At left, a plump pink pig with embroidered features. At right, an artist's palette complete with gay circles of color. Both are backed with felt for added protection. S-369, 370.



The all-time favorite pineapple pattern returns! The 12-inch doily can be made with or without the chain-loop ruffles. S-394.

Pattern Order Form

Please send without charge pattern leaflets which I have indicated below. I am enclosing a STAMPED SELF ADDRESSED envelope for the patterns I have checked.

1. Potholders (S-369, 370)
2. Doily (S-394)

Electric Membership Corporation.....

Comments .....

.....

This coupon expires February 20. Orders should be in by this date. Address coupons to: Rebekah Rivers, Carolina Farmer, Box 1699, Raleigh, N. C.

Over the Co-op Lines

Breakfast in the Reducing Diet

Due to the number of requests I have received for the booklet, "Breakfast in the Modern Reducing Diet," our supply of the booklet is exhausted. However, I have requested more copies of this popular booklet, and shall do my best to supply any of you who did not write for one previously. I hope that those of you who ordered the booklet early have found it of value.

Entertaining Sick Children

Mrs. Jake Biggerstaff, Nebo, Rt. 1, sends the following suggestion for entertaining the kiddies while they are convalescing or on rainy days: "I have always found the following helpful for entertaining sick children: Supply them with a bottle of glue, a scrapbook, magazines containing lots of pictures. Teach the child to cut them out and paste them in the scrapbook. If the child is too young to use scissors, it only takes a few minutes to cut the pictures out yourself, and let the child paste them in the scrapbook. It keeps them busy for hours!

Thanks to Mrs. Biggerstaff, and we might add that older children might be encouraged to make their scrapbooks to send to orphanages or to children's hospitals, for the enjoyment of other children. For very young children, there are new safe, plastic scissors now on the market, selling for about 15c.

Pattern Service

Mrs. Sarah McPherson, Rt. 2, Snow Camp, writes us that she enjoys the *Farmer.* She requests that we offer more patterns for children's clothing, patterns for toys, and aprons. We are so happy to receive special requests for patterns, for it makes it so much easier to choose those we offer each month.

While doing my office cleaning in preparation for the new year, I found quite a few odds and ends—booklets, patterns, etc.—which some of you may not have had a chance to request during 1953. A check of the supply cabinet shows that we still have ten copies of "Feeding a Crowd" on hand, and several extra copies of "Easy Ways to Chase Dirt." These booklets have been immensely popular during the past few months, and so many of you have written praise of them. I also have some extra pattern leaflets for stoles, the N. C. Rose Quilt, rugs, and a crocheted bedspread. Should any of you desire either the booklets or the pattern leaflets, drop a line to your homemaking editor, Box 1699, Raleigh.

Beverages

Ruth Current, your State Home Demonstration Agent, suggests the following tips for changing the flavor of beverages: A dash of salt in your coffee will improve the taste. Roll a marshmallow in cinnamon and drop it into the cup before pouring in hot cocoa (doesn't that sound delicious!). The juice of half a lemon and three drops of peppermint extract added to a glass of grape juice makes a refreshingly different beverage treat.

YOURS!

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WONDER WHEEL
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SEWING MACHINE

30 DAYS ONLY!
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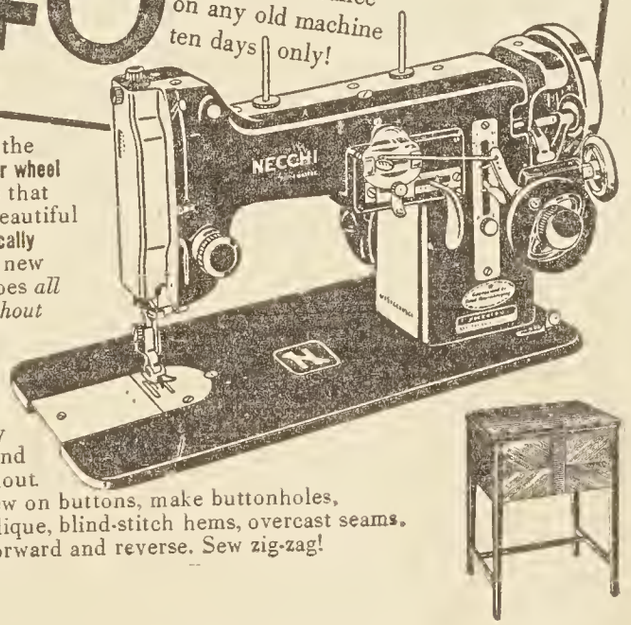

Don't wait! Get the marvelous **wonder wheel** sewing machine that does the most beautiful stitches **automatically** ... the amazing new machine that does *all* your sewing *without attachments!*

Save time and money. Do away with tedious hand finishing. Without attachments, sew on buttons, make buttonholes, monogram, applique, blind-stitch hems, overcast seams. Sew straight, forward and reverse. Sew zig-zag!

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Easy Terms With Small Down Payment

Please give me a free home demonstration of your sewing machine at no obligation to me.

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Town .....

(If RFD, please give directions)

Washington Report

(Continued from Page 5)

tric co-ops and residents of towns with municipally owned utilities.

Hearings before the Judiciary Subcommittee on Monopoly and Anti-Trust conducted by Senator William E. Langer (N. D.) highlighted past and present Department of Interior policies for selling power to private power companies. Federal laws make non-profit distributors, such as rural electric co-ops and municipalities, "preferred customers" because they pass on benefits of publicly financed projects to customers without extracting a profit . . . the only way owners can participate directly in resource development benefits.

As a matter of good business practice, any surplus power beyond that has always been sold to private companies.

However, in the past, a three-year "withdrawal clause" has enabled Interior to recapture any of this surplus power for non-profit distributors as their loads grow.

Anadahl on Defensive

On the defensive at the hearing was Assistant Secretary of Interior Fred Aandahl. Faced by rural electric co-op leaders, irate among other things because this withdrawal feature had been repealed under his new Bureau of Reclamation power marketing criteria for the Missouri Basin areas, Aandahl stood firm for a while, hedged, and finally appeared to retreat a step or two. The rural electric leaders had other complaints, particularly regarding a January 1 deadline for signing contracts for their long-range requirements for Bureau power. Aandahl tried to brush off the January 1 "deadline" as nothing but a necessary date for Interior's planning purposes.

Neither the limited retreat nor Aandahl's explanations won much satisfaction from the rural electric leaders.

Not only did Aandahl try to explain the deadline away as meaningless, but he claimed the effect of making short-term contracts of three to five years, rather than the maximum of 20 years, would eliminate evils which the Missouri Valley representatives foresaw in repeal of the withdrawal clause.

Why, then, Senator Langer wanted to know, was it necessary to impose a deadline for co-op contracts with the Bureau, or for substitution of short-term contracts with non-preference customers for the withdrawal clause?

An interesting sidelight is that only about a year ago Langer and Aandahl were both the central figures in the Republican primary in North Dakota. Then Governor Aandahl was trying to take over Langer's seat in the U. S. Senate. It was widely acknowledged that Aandahl lost his bid largely on the basis of his votes on Federal power development and REA during his previous service in the House of Representatives.

Efforts of Nelsen

REA Administrator Ancher Nelsen was not a figure in the opening stages of the Langer subcommittee on Monopoly and Anti-Trust, probing into effects of changes in Interior's power marketing policies this year. But as long ago as October, Nelsen acknowledged privately that the Interior Department's new "rules" would have to be changed in some measure to provide for future load growth of the REA borrowers. And, he revealed, he was trying to obtain such necessary changes.

Nelsen took his case to the central target of criticism of the new policies and of the Langer subcommittee hearings, Assisant Secretary of Interior Aandahl. He pressed the case with Aandahl's boss, Secretary of Interior Douglas McKay, and finally tried to get the White House to step in. His efforts were directed to "work out" a compromise rather than repeal or a thorough rewriting of the new Interior power policy and Bureau of Reclamation power marketing criteria, which rural electric cooperative leaders insist is necessary to protect their preference rights.

* * *

One of the most vital activities of the March of Dimes is to recruit emergency medical help to meet the threat of epidemics. In 1953, the organization sent 573 nurses, 899 physical therapists and three doctors into stricken areas.

* * *

It is known that Nelsen even turned down an attractive opportunity to become Assistant Secretary of Agriculture in the midst of the growing resentment among rural leaders over Interior's policies. Nevertheless, Nelsen's role as the "compromiser" is open to doubt, and the achievements are challenged on at least one score. The REA Administrator declares a modification of the criteria announced the day after the Langer subcommittee hearings recessed was worked out with Aandahl by him, and that he tried to obtain a White House announcement of the modification on the Saturday before the hearings began.

Whether that is the accepted view or not, the modifications failed to satisfy rural electric leaders who declare that Interior's policies still grant preference rights, illegally, to profit power companies, will reduce the amount of firm power in the years ahead for preference customers and threaten to increase Bureau power costs. All of these things mean higher rates and insecure power supply for Missouri Basin farmers, they reason.

There is an additional question whether the modification, which Nelsen says he worked out with Aandahl previously, would have been cleared and approved by Interior had not the Langer subcommittee hearings made a public issue of the power supply problem of rural electric co-ops.

PLEASE NOTICE

In 1941 I brought to an end 15 years' piles-hemorrhoids suffering. I will gladly tell any sufferer how I did it, with no obligation. (Adv.)

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Care of Poinsettas

(Continued from Page 21)

and rooted will give you good Christmas bloom.

A good potting soil can be made by mixing equal parts of sandy soil; clay loam, and well rotted stable manure.

The poinsettia is not an ideal house plant. It is rather exacting in its requirements for best growth. The average home usually does not afford the proper temperatures, light, or atmospheric conditions. Poinsettias require regular watering—every day is necessary—but not excessive watering. They should be placed where they will get a maximum amount of daylight and sunshine.

Day temperature should be about 70 to 72 degrees and night temperatures should never be allowed to drop below 60 degrees. Sharp fluctuations in temperatures or cold drafts may cause the leaves to drop. A very dry atmosphere or one containing gas will do the same. The poinsettia is a short day plant—that is, it will bloom only when the days are short (November, December, January). Therefore, after late October it should not be placed where it will be exposed to artificial light at night. Such exposure may prevent blooming or cause poor blooms.

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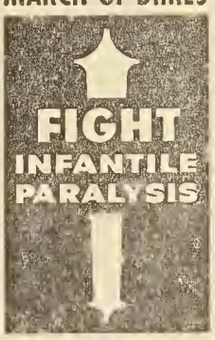

JANUARY 2-31

The Rural Exchange

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DO YOU have an old auto stored away? Here's your opportunity to convert it into cash. Highest prices paid for models before 1915. Also want license tags around 1910. Write complete information, price wanted to J. J. Malpass, Burgaw, N. C.

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WATCHES WANTED. Any condition. Also broken jewelry, spectacles, dental gold, diamonds, silver. Cash sent promptly. Mail articles. Satisfaction guaranteed. Lowe's, Holland Bldg., St. Louis 1, Missouri.

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Rural Electric Co-op Members
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Statewide Report

By William T. Crisp

A Charlotte firm, American Hardware & Equipment Company, recently figured in an important Federal court decision. After paying several thousand dollars to support the activities of the National Tax Equality Association (NTEA), the company attempted in filing its tax returns to deduct these payments from income as "contributions". The Bureau of Internal Revenue ruled that this was unlawful and the company appealed.

The Tax Court, the Court of Appeals and the United States Supreme Court have agreed with the Bureau. Each held that these payments represented neither a business expense nor a contribution. Their holding was based upon the fact that NTEA's main activity—influencing public opinion and legislation so as to bring about a rivisal of the Federal tax structure—is basically political.

In this effort NTEA has aimed its biggest guns at cooperatives, including electric cooperatives. And among NTEA's largest financial supporters have been the commercial power and light companies. This is not unbelievable when one considers that for several years the public has witnessed a continuous stream of high-priced "advertising" directed by these companies against basic Federal power policies, power projects such as TVA and Buggs Island, and even electric membership corporations themselves.

This has not been business advertising in any sense of that term. It makes no pretense at selling one watt of electricity. It is politics, pure and simple, and its objective, similar to NTEA's, is to influence public opinion and Congress so as to secure legislative changes favorable to the sponsoring monopolies.

Yet, the cost of this campaign is not only deducted by these companies for tax purposes; it is also cited before state and Federal utility commissions as part of the "expenses of operation" to justify these companies' rates.

For many of North Carolina's electric cooperatives, who, though attacked by this campaign, are compelled through their purchase of energy from sponsoring companies to help finance it, this is indeed an ironic and sobering fact.

Senator William Langer (Rep., N. D.) indicated recently that his subcommittee may investigate these practices. In the meanwhile it would not be out of order for the utility commissions and tax departments of both state and Federal governments to ask a few questions themselves.

If we remember correctly, these particular companies have always been quite outspoken in their charge that all groups should pay their fair portion of the tax burden.

EDITORIALS

A Good Committee

REA Administrator Ancher Nelsen made a wise move last month when he appointed a grass roots advisory committee to help him study power problems (see page 16). The committee consists of sixteen rural electric leaders from all parts of the country who will meet at intervals with Mr. Nelsen to make recommendations on how REA should proceed on some of the more ticklish aspects of Rural Electrification.

The first meeting of the group was held on December 29-30, in an atmosphere of considerable uncertainty. On December 23, Representative Miller (Nebr.) announced that the House Interior Committee would hold hearings on the controversial marketing standards for Federal Power in the Missouri Basin on the same dates Mr. Nelsen's committee was to meet. His committee, Mr. Miller said, would hear from Mr. Nelsen's committee.

The catch was that Mr. Nelsen did not announce his committee membership until December 24, and in his correspondence with members did not mention anything about a Congressional hearing. It turned out that Mr. Nelsen appeared before the Miller committee while his new advisors stayed in session elsewhere. Evidently the whole fuss was just the result of some crossed wires somewhere in the Administration machinery.

Anyway, the idea of the committee is sound. We were especially glad to learn that a prominent official from the Interior Department attended the first session to discuss the new Missouri marketing criteria. Neither Administrator Nelsen nor local rural electric leaders were consulted before the marketing standards were announced. If this new committee proves a means of bringing all parties concerned with vital power issues together for a roundtable discussion it will have served a good purpose.

An Invitation to Disaster

We have heard several disturbing stories recently about farm homes burning to the ground. The fires were caused in these instances by a combination of inadequate wiring and a failure to observe safety precautions.

One electric cooperative manager told us of going to a burned farm home and digging a penny out of the blackened, twisted metal that had been the fuse box. The farmer, tired of blown fuses and unwilling to install an extra circuit, had inserted the penny behind the fuse.

You know what happened. He didn't have any more trouble with the fuse, naturally, because the next time his wire became overloaded the penny wouldn't "blow." So the wire got hotter and hotter until it burned through its insulation and started a fire.

In another case, a co-op member also got tired of replacing fuses constantly. But, not wanting to use a penny, he began using 30- and 40-ampere fuses instead of 20-amp fuses on his appliance circuits. The result was the same. The short circuit would have blown the correct fuse, but the larger one withstood the heat. The house burned.

Too often when farm homes were wired the owners did not insist that they be wired properly. The result was a minimum job, capable of carrying lights and a few small appliances, but nowhere near equal to the heavier equipment which has since been added. Most of the homes now need extra circuits to carry the increased loads.

A blown fuse is a danger signal. It tells you that particular circuit is overloaded, or a short circuit has developed. If it continues to blow, you should have your wiring inspected by a competent electrician. By tampering with the fuse in any way you invite disaster.

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